L 5078-66 EPA(a)-2/EWT(m)/EPF(n)-2/EWP(t)/EWP(b) LJP(c) JD/DM

ACC NR: AP5022625 UR/0089/65/019/008/0109/0113

539.183.2

38
27
B

AUTHOR: Donets, Ye. D.; Shchegolev, V. A.; Yermakov, V. A.

TITLE: Synthesis of the isotope of mass 256 of the 102-nd element (lawrencium)

SOURCE: Atomnaya energiya, v. 18, no. 2, 1965, 109-113

TOPIC TAGS: lawrencium, transuranium elements

ABSTRACT: After a brief review of the discovery, in 1961, of lawrencium of an isotope mass 257, the authors present the results of their own identification of a new isotope of mass 256 of the same element. The experiments were conducted at the Joint Institute for Nuclear Research, in Dubna, by using the interior beam of multiply charged ions of the 3-meter cyclotron. The new isotope was synthetized from the nuclear reaction of $_{95}Am^{243}(_{8}O^{18}, 5n)\,_{103}Lw^{256}$. The isotope was identified by the $_{100}Fm^{252}$ isotope. This end product was obtained as a result of a $_{101}Mv^{256}$ electron capture and a $_{103}Lw^{256}$ alpha decay. The new 256-isotope was identified by the same method which had been used by the authors for the identification of the isotope 256 of the 102-nd element (Atomnaya Energiya, 16, 195 (1964)). The arrangement used for the synthesis of $_{103}Lw^{256}$ and the build-up of $_{100}Fm^{252}$ is schematically illustrated in the

Card 1/3

article. Spectrometers having a resolution of about 60 kev and a very low background were used. The experiments involved bombarding (8 to 12 hours) a $^{243}_{95}Am$ target with accelerated $^{18}_{8}O$ ions. The alpha-spectrum of accumulated Fm-products is graphically presented. The half-life of alpha activity at E=7.04 Mev was about 25 hours. It was experimentally shown that the $\sigma \times 10^{-32}$ sq cm cross-section needed for the formation of Lw-256 isotope was attained at the energy level of 96 Mev. The experiments measuring the half-life of the 256-isotope are described. The half-life time was close to 45 sec. In conclusion, the radioactive properties of this new isotope were summarized and the character of the cross-section of the reaction $^{243}_{95}Am(^{18}_{8}O, 5n)^{256}_{103}Lw$ was evaluated.

The authors wish to acknowledge with gratitude the assistance given to them by G. N. Flerov (general consultation), A. N. Filippov (cyclotron operation), L. Kumpf and A. M. Sukhov (electron equipment), A. G. Pil'kov (mechanical arrangements), E. Z. Ryndina and V. M. Kushnirук (semiconductor detectors), V. I. Kuznetsov, A. G. Kozlov and A. P. Smirnov-Averin (general assistance). The last two persons belonged to

L 5078-66
ACC NR: AP5022625

the staff of the Institute of physics and power of the State committee for utilization of atomic energy. Orig. art. has: 2 diagrams and 4 graphs.

ASSOCIATION: none

SUBMITTED: 20Apr65 ENCL: 00 SUB CODE: NP

NO REF SOV: 003 OTHER: 001

Card 3/3

GUSHCHENKO, I.I.; DUBIK, Yu.M.; YERMAKOV, V.A.

Terminal eruption of the Klyuchevskiy Volcano in 1962-1963.
Biul. vulk. sta. no.37:37-51 '64. (MIRA 18:3)

YERMAKOV, V.A., inzhener.

Pneumatically operated doors in drying chambers. Der. prom. 6 no.5: 21-22 My '57. (MIRA 10:6)

1. Rostovskaya na Donu fabrika myagkoy mebeli.
(Drying apparatus) (Pneumatic control)

YERMAKOV, V.A.

Prospecting for new petroleum fields in Krasnodar Territory.
Geol. nefti i gaza 5 no.6:16-20 Je '61. (MIRA 14:6)

1. Trest Krasnodarnefterazvedka.
(Krasnodar Territory--Petroleum geology)

YEGOYAN, V.L.; YERMAKOV, V.A.; KIYKO, K.I.

Discovery of upper Triassic marine deposits in the Teysk-Berezanskiy area of southwestern Ciscaucasia. Dokl.AN SSSR 138 no.6:1417-1420 Je '61. (MIRA 14:6)

1. Upravleniye neftyanoy i gazovoy promyshlennosti "Krasnodarneft'."
2. Predstavleno akademikom A.L.Yanshinym.
(Teysk region--Geology, Stratigraphic)
(Berezanskiy region--Geology, Stratigraphic)

YERMAKOV, V.A.

New gas-condensate field in Krasnodar Territory. Geol.nefti i gaza 6 no.5:59-60 My '62. (MIRA 15:5)

1. Krasnodarskiy trest po neftyanoy geologicheskoy razvedke. (Krasnodar Territory—Condensate oil wells)

YERMAKOV, V.A., inzh.

Load capacity of plastic gear wheels. Vest.mashinostr. 42 no.5:48-53 My '62. (MIRA 15:5)
(Gearing) (Plastics)

YERMAKOV, V.A.

Reconstruction of drying chambers at the Rostov furniture plant. Der.i lesokhim. prom. 3 no.4:20-21 Ap '54. (MLRA 7:5)

1. Glavnyy inzhener Rostovskoy n/D fabriki myagkoy mebeli.
(Rostov--Lumber--Drying) (Lumber--Drying--Rostov)

YERMAKOV, V.A.

Outlook for finding oil and gas in Ust'-Labinsk District, Krasnodar Territory. Neftegaz. geol. i geofiz. no.3:9-12 '63. (MIRA 16:8)

1. Krasnodarskiy trest po neftyanoy geologicheskoy razvedke.

ACCESSION NR: AP4020324 S/0089/64/016/003/0195/0207

AUTHOR: Donets, Ye. D.; Shchegolev, V. A.; Yermakov, V. A.

TITLE: Synthesis of the isotope of element 102 with mass number 256

SOURCE: Atomnaya energiya, v. 16, no. 3, 1964, 195-207

TOPIC TAGS: element 102, mass number 256, nuclear reaction, transuranium element, decay period, energy dependence, U sup 238

ABSTRACT: In the nuclear reaction U^{238} (Ne^{22}, 4n)102^{256} (a-active isotope of element 102 with mass number 256) is synthesized. The registration and identification of the isotope is made according to the daughter isotope Fm^{252}. The measured half-lifeperiod of 102^{256} is about 8 sec. The energy dependence of the cross section for the formation of isotope 102^{256} in the reaction U^{238} + Ne^{22} is studied. Its maximum is in the area of 112 Mev. The cross section at the maximum reaches about 4.5×10^{-32} cm^2. The work was carried out in an internal beam of the trimeter cyclotron of the nuclear reaction laboratory of the Joint Institute for Nuclear Research. "In conclusion, we are deeply grateful to

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ACCESSION NR: AP4020324

G. N. Flerov with whose guidance and warm participation this work was accomplished. We also thank the subdivision leaders Yu. Ts. Oganesyan, A. N. Filipson and A. S. Pasyuk for providing so many intensive beams of accelerated neon ions for our experiments." Orig.art. has: 13 figures.

ASSOCIATION: None

SUBMITTED: 18Nov63 DATE ACQ: 31Mar64 ENCL: 00

SUB CODE: NS, PH NO REF SOV: 012 OTHER: 008

Card 2/2

BRANDSHTETR, I.; VOLKOV, V.V.; YERMAKOV, V.A.; ZVAROVA, T.S.;
KRZHIVANEK, M.; MALY, Ya.; SU KHUN-GUY [Su Hung-kuei]

Study of the products of reactions of heavy elements with multicharge ions. Part 2: Yield of some isotopes of californium and fermium during the irradiation of thorium and uranium by O^{16}, O^{18}, and Ne^{22} ions. Radiokhimiia 5 no. 6:706-711 '63. (MIRA 17:7)

BRANDSHTETR, I.; WAN TUN-SEN; YERMAKOV, V.A.; ZVARA, I.; IVANOVA, T.S.; KNOBLOKH, V.; KRZHIVANEK, M.; MALY, Ya.; SU KHUN-GUY [Su Hung-kuei]

Determination of the yield of some fragments in the fission of heavy nuclei induced by multicharge ions Part 1: Fission of Th^{232} induced by O^{18} and Ne^{22} ions. Radiokhimiia 5 no. 6: 715-720 '63. (MIRA 17:7)

L 00037-66 EWT(m) DIAAP

ACCESSION NR: AP5020306 UR/0186/65/007/004/0453/0461

AUTHOR: Dedov, V. B.; Volkov, V. V.; Gvozdev, B. A.; Yermakov, V. A.; Lebedev, K. A.; Razbitnoy, V. M.; Trukhlyayev, P. S.; Chuburkov, Yu. T.; Yakovlev, G. N.

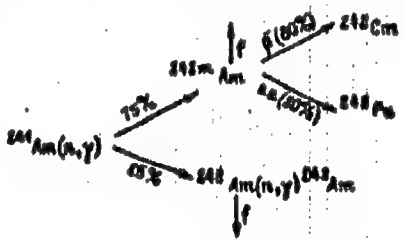
TITLE: Production of Pu-242 and Cm-242 from neutron-irradiated Am-241

79, 25 B

SOURCE: Radiokhimiya, v. 7, no. 4, 1965, 453-461

TOPIC TAGS: plutonium, curium, americium, extraction, neutron irradiation

ABSTRACT: Irradiation of Am-242 with thermal neutrons produces Pu^{242}, Cm^{242} and Am^{243} which are of great interest in a number of physical and radiochemical investigations. The synthesis scheme is as follows:



Card 1/2

L 00037-66
ACCESSION NR: AP5020306

The thermal neutron cross section of Am^{241} is 900 barn, thus even upon short irradiation with a high density thermal-neutron beam a significant amount of the above isotopes may be produced. It can be seen from the above process that the yield of fission products is small since they are produced mainly during fission of Am^{242}. This facilitates the chemical processing of irradiated substances. Production of Pu^{242} by this process requires much less time than the method which uses Pu^{239} as starting material. The authors describe the chemical separation of Pu^{242}, Cm^{242} and Am^{243} from irradiated Am^{241}. The scheme for the chemical processing was selected to be such that it would produce rapid separation of the products. The main separation steps involved chromatographic and chemical extraction methods. Chromatographic separation was made extremely difficult by high α-activity due to the presence of Cm^{242}. Chemical processing was carried out in a shielded area on a special stand with remote control of all operations. The article indicates some properties of curium oxalate, potassium curium sulfate, curium hydroxide and curium carbonate. Orig. art. has: 5 tables and 3 figures.

ASSOCIATION: none

SUBMITTED: 18Apr64 ENCL: 00 SUB CODE: GC, NP

NO REF SOV: 004 OTHER: 005

Card 2/2

DONETS, Ye.D.; SHCHEGOLEV, V.A.; YERMAKOV, V.A.

Synthesis of the 103d element (lawrencium) with mass number 256. Atom. energ. 19 no.2:109-113 Ag '65. (MIRA 18:9)

YERMAKOV, V. F.

YERMAKOV, V. F. "Investigation of the Effect of Fuel Temperature on the Working Cycle of a High-Speed Engine with Compression Ignition." Min River Fleet USSR. Leningrad Inst of Water Transport Engineers. Leningrad, 1956. (Dissertation for the Degree of Candidate in Technical Sciences)

So: Knizhaya Letopis', No. 17, 1956

KHANDOV, Z.A., doktor tekhn.nauk, prof.; YERMAKOV, V.P., kand.tekhn.nauk

Characteristics of diesel cycles with fuel additions to the air charge being compressed. Trudy LIVT no.2:3-22 '60. (MIRA 15:3)

(Marine diesel engines)

YERMAKOV, V.F., kand.tekhn.nauk

Investigating the atomizing of heated diesel fuel. Trudy LIVT no.2:23-28 '60. (MIRA 15:3)
(Marine diesel engines) (Diesel fuels)

KHANDOV, Z.A., doktor tekhn.nauk, prof.; YERMAKOV, V.F., kand.tekhn. nauk

Investigating the feasibility of improving the operations of 3D6 engines. Trudy LIVT no.12:3-10 '61. (MIRA 14:9)
(Marine engines)

ACC NR: AR7004111 (4N) SOURCE CODE: UR/0169/66/000/012/V050/V050

AUTHOR: Vyalov, S. S.; Yermakov, V. F.

TITLE: Decrease in the strength of ice with time

SOURCE: Ref. zh. Geofizika, Abs. 12V328

REF SOURCE: Tr. koordinats. soveshchaniy po gidrotekhn., vyp. 23, 1965, 89-99

TOPIC TAGS: glaciology, ice strength, dynamometer, ice rheology, elasticity, rheologic property, ice, plastic deformation, plastic strength

ABSTRACT: A new method of determining the rheological properties of ice using a dynamometric device is examined. The purpose of the method is to accelerate and simplify testing procedures. The test is conducted by measuring the initial load applied to the specimen from the tension on an elastic dynamometer. The stress transmitted to the sample through the dynamometer, produces in the sample creep deformation which, in turn, causes the dynamometer to relax and reduce the stress. The reduction of stress will continue, under any given stress, until the sample's deformation achieves stabilization, i.e., until a state of equilibrium is attained between the load applied to the sample through the dynamometer and the

Card 1/2 UDC: 551.32:63

ACC NR: AR7004111

internal resistance of the ice. If the initial strain applied to the sample is approximately equal to the assumed-instantaneous strength, then the stabilization of deformation will correspond to the limiting equilibrium. Since ice does not have stress-rupture strength, a nominative value of relative deformation for a specific length of time may be regarded as the deformation stabilization. Dynamometer testing may be regarded as creep tests with stress varying with time; changes in stress and deformation are interdependent. The proposed method is recommended for conducting tests under different loads (compression, rupture, shear). In conclusion, data obtained in testing samples of polycrystalline glacier and lacustrine ice (Mirnyy, Antarctica), using the dynamometer, are presented. A bibliography of 5 titles is included. G. Deyev. [Translation of abstract]

SUB CODE: 08/ [SP]

Card 2/2

KHANDOV, Zosima Aleksandrovich; YERMAKOV, Vasiliy Fedorovich; BOTKIN, P.P., kand. tekhn. nauk, retsenzent; AL'TMAN, I.R., inzh., retsenzent; ZAKHARENKO, B.A., nauchn. red.; VASIL'YEVA, N.N., red.; KRYAKOVA, D.I., tekhn. red.

[Marine diesel engine operations with a two-stage fuel feed] Rabota sudovogo dizelia s dvukhfaznoi podachei topliva. Leningrad, Sudpromgiz, 1963. 82 p. (MIRA 16:12)
(Marine diesel engines)

ODINTSOV, M.M., doktor geol.-min. nauk, otv. red.; PAL'SHIN, G.B., kand. geol.-min. nauk, red.; LOGACHEV, N.A., red.; PINNEKER, Ye.V., red.; GRECHISHCHEV, Ye.K., kand. tekhn. nauk, red.; ASTRAKHANTSEV, V.I., red.; VOLOGODSKIY, G.P., red.; KUKUSHKIN, I.P., red.; FEDOROV, I.P., red.; TIZDEL', R.R., red.; SEDOVA, N.G., red.; YERMAKOV, V.F., red.; ASTAF'YEVA, G.A., tekhn. red.; POLYAKOVA, T.V., tekhn. red.

[Bratsk Reservoir; engineering geology of the territory] Bratskoe vodokhranilishche; inzhenernaia geologiia territorii. Moskva, Izd-vo AN SSSR, 1963. 274 p. (MIRA 16:12)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye. Institut zemnoy kory.
(Bratsk Reservoir region--Engineering geology)

YERMAKOV, V.G., kandidat tekhnicheskikh nauk.

Application of the theory of jets to the process of ejection. [Trudy] TSKTI 12:109-118 '49. (MLRA 8:4)
(Jets) (Flame)

BABENKO, Kh.L., kand.tekhn.nauk; YERMAKOV, V.G.

Testing of the blading of a steam turbine with counterpressure.
Energomashinostroenie 7 no.8:12-15 Ag '61. (MIRA 14:10)
(Steam turbines--Blades)

YERMAKOV, V.G., inzh.; ABRAMOV, V.F., inzh.

Mechanism for turning boring rods. Bezop.truda v prom. 5 no.12:31 D '61. (MIRA 15:1)

1. Trest Artemgeologiya.

(Boring machinery)

PIS'MEN, M.K.; YERMAKOV, V.G.; BELYANIN, Yu.I.; YAROSLAV, T.Ye.

Experimental pyrolysis of mazut and shale tar. Gaz. prom. 6 no.11: 18-22 '61. (MIRA 15:1)

(Pyrolysis) (Mazut)

SOV/81-59-5-16825

Translation from: Referativnyy zhurnal, Khimiya, 1959, Nr 5, p 455 (USSR)

AUTHOR: Yermakov, V.G.

TITLE: The Production of Industrial Gases by the Gasification Method of Lean Fuels With Removal of Slags in the Liquid State

PERIODICAL: V sb.: Gazifik. tverdogo topliva. Moscow, Gostoptekhizdat, 1957, pp 122 - 126; V sb.: Khim. pererabotka topliva. Moscow, AS USSR, 1957, pp 400 - 407

ABSTRACT: The results are given of the gasification of Silesia coal semi-coke in a gas generator for the gasification of lump fuel with the discharge of slag in liquid form. Vapor-oxygen (VO) and carbon dioxide-oxygen blowing was used. When using VO blowing a gas is obtained with a total CO and H_2 content of up to 97%, whereby the gasification of the 10 - 50 mm fractions in the fuel is possible. The use of carbon attains the same value as it does

Card 1/2

SOV/81-59-5-16825

The Production of Industrial Gases by the Gasification Method of Lean Fuels With Removal of Slags in the Liquid State

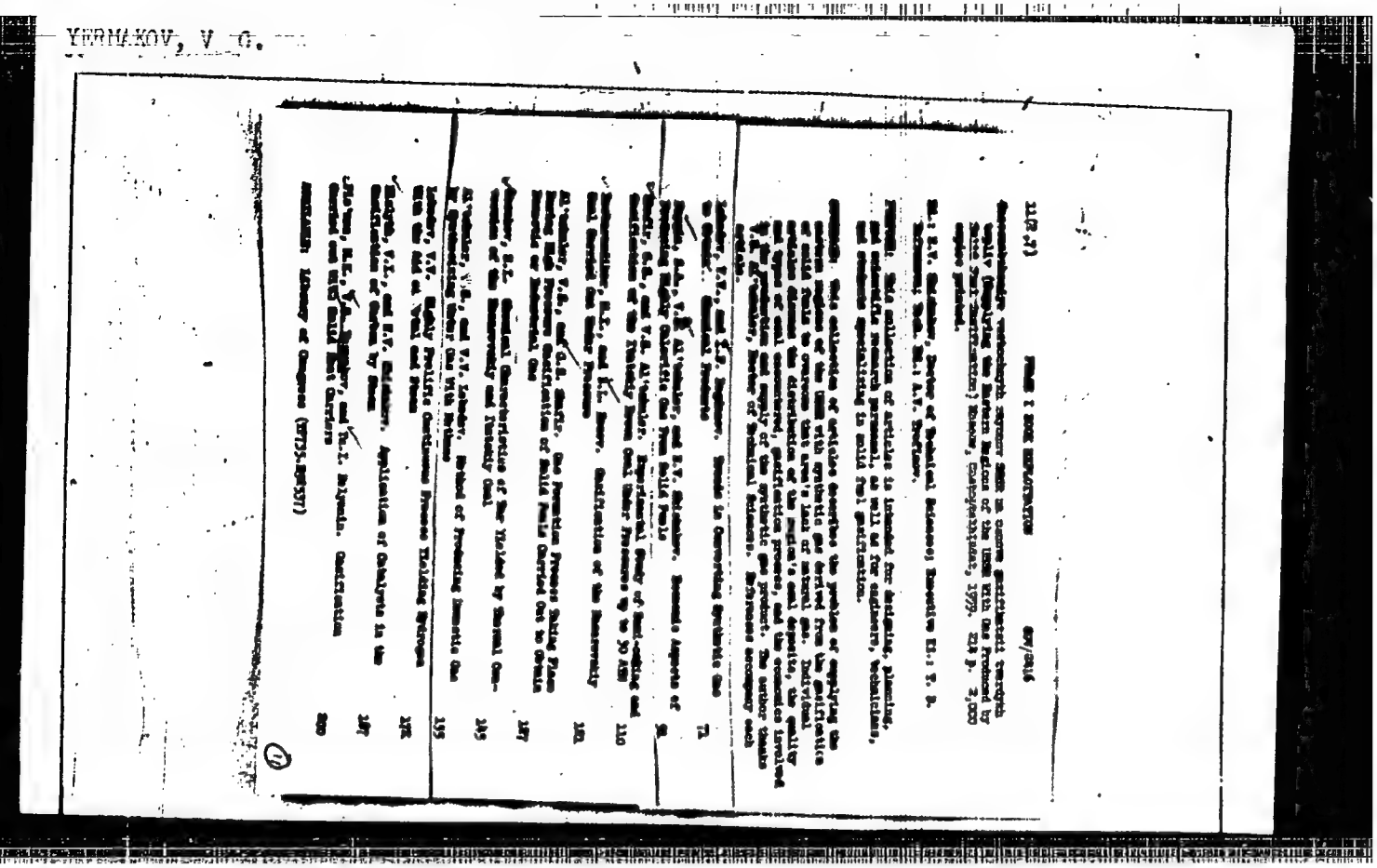
in gasification with discharge of solid slag, but the specific expenditure of vapor for obtaining 1 nm^3 ($CO+H_2$), applying the VO-blowing, is 4 times less.

B. Englin

Card 2/2

PIS'MEN, M.K.; [illegible] BELYANIN, Yu.I.

Gasification of oil shale with a solid heat transfer agent.
Gaz. prom. no.9:21-27 S '58. (MIRA 11:10)
(Gas manufacture and works) (Oil shales)



YERMAKOV, V. G.

YERMAKOV, V.I.; ZAGORETS, P.A.; SMIRNOV, N.I.

Study of solutions by high-frequency methods. Part 1. Zhur. fiz. khim. 36 no.6:1180-1185 Je'62 (MIRA 17:7)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyeva.

YERMAKOV, V. I. Cand Agricult Sci

Dissertation: "Methods for Acclimatization of Sequoia in the Forests of the South Crimea." 29/11/50

Moscow Forestry Inst

SO Vecheryaya Moskva
Sum 71

DIYEV, Nikolay Pavlovich, prof., doktor tekhn.nauk [deceased]; GOFMAN, Irina Petrovna, insh.; SHTEYNGART, G.M., kand.tekhn.nauk, retsenzent; YERMAKOV, V.I., insh., retsenzent; KRAVCHENKO, P.T., insh., retsenzent; GUDIMA, N.V., dotsent, red.; KAMAYEVA, O.M., red.izd-va; ISLAMOVA, P.G., tekhn.red.

[Metallurgy of lead and zinc] Metallurgiia svintsa i tsinka. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1961. 406 p. (MIRA 14:1)
(Lead--Metallurgy) (Zinc--Metallurgy)

YERMAKOV, V.I. (Moscow)

Universal instrument for the high-frequency physicochemical analysis and titration of solutions. Zhur. fiz. khim. 34 no.12:2838-2840 D '60. (MIRA 14:1)

1. Khimiko-tekhnologicheskiy institut imeni D.M. Mendeleyeva, Moskva.
(Titration) (Chemical apparatus)

YERMAKOV, V.I.

Investigation of electrolyte solutions by high-frequency methods.
Trudy MKHTI no.38:96-103 '62. (MIRA 16:7)

(Electrolyte solutions)
(Electrochemistry)

YERMAKOV, V.I.; ZAGORETS, P.A.

Investigation of solutions by high frequency methods. Part 3: Characteristic curves of electrical measuring cells and relaxation phenomena in solutions. Zhur.fiz.khim. 36 no.8:1632-1638 Ag '62. (MIRA 15:8)

1. Khimiko-tekhnologicheskiy institut imeni D.I.Mendeleyeva.
(Electrolyte solutions)

YERMAKOV, V.I.

Distribution of the composition of natural gases in Mesozoic sediments in Ciscaucasia. Gaz.prom. no.5:3-7 '63. (MIRA 16:6)
(Caucasus, Northern--Gas, Natural--Analysis)

BEZNOSOV, N.V.; GRISHINA, I.V.; YEFIMAKOV, V.I.

Prospecting for petroleum and gas pools associated with lithological and stratigraphical traps. Geol. nefti i gaza 7 no.3:16-22 Mr '63. (MIRA 16:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut prirodnykh gazov.

(Caucasus, Northern--Petroleum geology)
(Caucasus, Northern--Gas, Natural--Geology)

S/076/63/037/003/004/020
B101/B215

AUTHORS: Yermakov, V. I., Smirnov, N. I., and Zagorets, N. A. (Moscow)

TITLE: Study of solutions by high-frequency methods. VI. Dispersion effects in electrolyte solutions in a wide frequency range of the electromagnetic field

PERIODICAL: Zhurnal fizicheskoy khimii, v. 37, no. 3, 1963, 544-552

TEXT: A non-resonance circuit (Fig. 4) is suggested for measuring the relaxation effects in electrolytes. Measurements were conducted by using the equations $U_3 = \dot{U}kY_{br}/Y_{sol}$ or $Y_{sol} = \dot{U}k\dot{U}_{br}/\dot{U}_3$, where $k = k_2k_I/k_1k_{-I}$, U = voltage, Y = conductivity, the index $_{br}$ being related to the resistance box of the bridge and $_{sol}$ to the electrolyte solution. Measurements with frequencies up to 200 Mc/sec yielded a stepwise course of the curve electroconductivity versus concentration for KCl, $MgCl_2$, and $AlCl_3$. This is explained by steric hindrance effects on reformation of the hydrate complexes with a certain lifetime. Shortlived hydrates are found at

Card 1/2

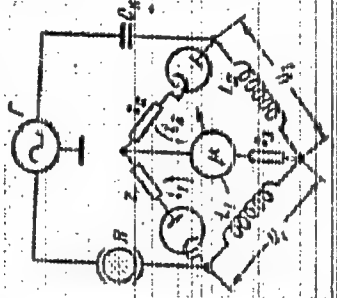
Study of solutions by high-...

frequencies above 10^8 cps, whereas below 1 Mc/sec, only the most stable hydrate shells are observed. There are 8 figures.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskiy institut im. D. I. Mendeleyeva (Moscow Institute of Chemical Technology imeni D. I. Mendeleyev)

SUBMITTED: November 5, 1961

Fig. 4. Principle of a z-meter circuit with high-frequency compensation; legend: Я = cell; Г = generator.



Card 2/2

L 12772-63 EPT(c)/EWT(1)/BDS AFFTC/ASD/ESD-3 Pr-4/Pi-4 OG/IJP(C)/JT(IJP)
ACCESSION NR: AP3002946 S/0076/63/037/006/1413/1419

AUTHOR: Zagoreta, F. A.; Yermakov, V. I.; Grunau, A. P. 69

TITLE: Investigations of solutions by high frequency and nuclear magnetic re-

Science methods. ... observation of complex spectra by means of a spin-

echo apparatus

SOURCE: Zhurnal fizicheskoy khimii, v. 37, no. 6, 1963, 1413-1415

TOPIC TAGS: high-frequency method, nuclear magnetic resonance method, spin echo apparatus, spin-lattice relaxation time, $PaCl_3 - UCl_4 F$

ABSTRACT: A method has been proposed for the relative determination of the spin-lattice relaxation time (T_1) by means of spin echo [illegible]. The

NH sub 4 F. Orig. art. has: 2 figures.

ASSOCIATION: Khimiko-tekhnologicheskiy institut im. D. I. Mendeleyeva
(Chemical Engineering Institute)

SUBMITTED: 00 DATE ACQ: 16 Jul 63 ENCL: 00
SUB CODE: 00 NO REF SOV: 005 OTHER: 002

Card 1/1

YERMAKOV, V.I.; NEMCHENKO, N.N.

Possibility of excluding oil- and gas-bearing zones on the basis of data of hydrocarbon analysis. Dokl. AN SSSR 155 no.1:85-87 Mr '64. (MIRA 17:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut prirodnogo gaza. Predstavleno akademikom A.A.Trofimukom.

ERMAKOV, V.I.; SHATSOV, A.N.

Radiometric surveying in oil-bearing regions of western Turkmenia.
Geol.nefti 1 no.8:34-39 Ag '57. (MIRA 10:12)

1.Institut nefti AN SSSR.
(Turkmenistan--Petroleum geology)
(Radioactivity--Measurements)

YERMAKOV, V.I.

YERMAKOV, V.I.; ZAKS, L.M.

Work of metrological institutes in the field of radio measurements. (MIRA 10:12)
Izm. tekh. no.6:71-73 N-D '57.
(Radio measurements)

YERMAKOV, V.I.; MASLOV, V.N.; STOLYAROV, O.G.

Application of high-frequency analysis to colloid chemical investigations. Koll.zhur. 19 no.2:198-200 Mr-Ap '57. (MLRA 10:5)

1.Moskovskiy khimiko-tekhnologicheskiy institut im. D.I. Mendeleyeva.
(Colloids) (Electrochemical analysis)

SOV/7-58-7-4/13

21(8)

AUTHORS: Alekseyev, F. A., Yermakov, V. I., Filonov, V. A.

TITLE: Concerning the Content of Radioactive Elements Found in Waters of Oil Field Deposits (K voprosu o soderzhanii radioelementov v vodakh neftyanykh mestorozhdeniy)

PERIODICAL: Geokhimiya, 1958, Nr 7, pp 642-649 (USSR)

ABSTRACT: The content of radium and uranium found in waters of oil field deposits was examined; radium was determined radio-chemically (Ref 3); the content of radon was measured by means of the electrometer [illegible], the amount of uranium ascertained by luminescence. The research was conducted at the Laboratoriya yadernoy geofiziki i geologii Instituta nefti AN SSSR (Laboratory for Nuclear Geophysics of the Petroleum Institute AS USSR). Waters from wells as well as surface water from oil fields of West Turkmenia (Tables 1-3) were examined. Samples were taken from the petrol and mineral gas province of Emba (Kazakhstan) (Tables 4,5) and from oil fields in the Cis-Uralian region (Tables 6-8). Independent of the type of deposit, the radium content ranges from 10^{-10} g/l, seldom under 10^{-11} g/l. The uranium content seldom surmounts 1.0 . 10^{-7} g/l.

Card 1/2

SOV/7-58-7-4 .3

Concerning the Content of Radioactive Elements Found in Waters of Oil .ield Deposits

The largest quantities of radium are to be found in waters of the calcium chloride type. Uranium is concentrated in waters of the sodium bicarbonate type. Radium is found in largest amounts in the marginal zones of the oil field deposits. There are 8 tables and 12 references, 11 of which are Soviet.

ASSOCIATION: Institut nefti AN SSSR, Moskva (Petroleum Institute of the Academy of Sciences, USSR, Moscow)

SUBMITTED: July 7, 1958

Card 2/2

YERMAKOV, V.I.

PHASE I BOOK EXPLOITATION SOV/3600

Yadernaya geofizika; sbornik statey po ispol'zovaniyu radioaktivnykh izlucheniy i izotopov v geologii nefti (Nuclear Geophysics; Collection of Articles on the Use of Radioactive Radiation and Isotopes in Petroleum Geology) Moscow, Gostoptekhizdat, 1959. 370 p. Errata slip inserted. 4,000 copies printed.

Ed.: F.A. Alekseyev, Professor, Doctor of Geological and Mineralogical Sciences; Exec. Ed.: A.P. Nalmatsev; Tech. Ed.: A.S. Polosina.

PURPOSE: This book is intended for petroleum geologists, geophysicists and scientists engaged in geological research who are interested in radiometric techniques of petroleum prospecting.

COVERAGE: The collection contains 28 articles compiled by staff members and aspirants of the Laboratory for Nuclear Geology and Geophysics of the Petroleum Institute (now the Institute for Geology and Mineral Fuel Processing) of the Academy of Sciences USSR, the Laboratory for Radioactive Logging of the All-Union Scientific Research Institute of Geophysics, and the heads of councils for planning research projects for petroleum enterprises. The articles treat new material on radiometric surveying in petroleum geology, describe radiometric instruments (counters, etc.) for registering neutrons and gamma rays, give the results of research with models of rock strata, introduce fundamentals of a new method for effectively utilizing radioactivity in the analysis of rock samples from petroleum-survey bore holes, etc. Problems of method in the study and interpretation of radiometric measurements in bore holes are reviewed, as well as the results of studies in the nonabsorption of tritium in tracing the movement of petroleum and water in a stratum. Finally, a new method of surveying based on measuring the radioactivity of the surface of a prospective petroleum deposit is described. No personalities are mentioned. References accompany each article.

YERMAKOV, Y.I.

Apparatus for determining the electric conductivity and concentration of solutions. Zav.lab. 26 no.2:229-230 '60. (MIRA 13:5)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I. Mendeleyeva.
(Solution (Chemistry)) (Electric conductivity)

YERMAKOV, V.I.; SAKODYNSKIY, K.I.

Use of high-frequency analysis in the study of absorption kinetics. Khim.prom. no.12:868-870 D '61. (MIRA 15:1)
(Absorption)

ZAGORETS, P. A.; SMIRNOV, N. I.; YERMAKOV, V. I.

Investigation of solutions by high-frequency methods. Part 4: Frequency of the measuring generator as dependent on the conductance and dielectric constant of electrolyte solutions. Zhur. fiz. khim. 36 no.12:2743-2748 D '62. (MIRA 16:1)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyeva.

(Electrolyte solutions)

YERMAKOV, V. I.; SMIRNOV, N. I.; ZAGORETS, N. A.

Study of solutions by high-frequency methods. Part 6. Zhur. fiz. khim. 37 no. 3:544-552 Mr '63. (MIRA 17:5)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyeva, Moskva.

ZAGORETS, P.A.; YERMAKOV, V.I.; GRUNAU, A.P.

Study of solutions by high-frequency methods. Part 8: Structure of Co^{2+} and Cu^{2+} solvates in methanol solutions. Zhur.fiz.khim. 37 no.10:2155-2162 O '63. (MIRA 17:2)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyeva.

SHILOV, Yu.M.; DARAGAN, V.L.; YERMAKOV, V.I.

Possibility of determining the moisture of the granular substance for tablets by measuring its dielectric permeability. Aptech. delo 12 no.3:22-24 My-Je'63 (MIRA 17:2)

1. Tsentral'nyy aptechnyy nauchno-issledovatel'skiy institut i Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyeva.

YERMAKOV, V.I.; ZAGORETS, P.A.

Study of electrolyte solutions by high frequency methods. Part 5. Zhur.fiz.khim. 37 no.1:184-186 Ja '63. (MIRA 17:3)

1. Khimiko-tekhnologicheskiy institut imeni Mendeleyeva.

YERMAKOV, V.I.

Improving pneumatic systems of automobiles. Avt. prom. 30 no.11: 17-18 N '64 (MIRA 18:2)

ACCESSION NR: AP4034592 S/0076/64/038/004/1030/1031

AUTHORS: Yermakov, V.I.; Zagorets, P.A.; Grunau, A.P.

TITLE: A device for thermostating specimens in NMR experiments

SOURCE: Zhurnal fizicheskoy khimii, V.38, no.4, 1964, 1030-1031

TOPIC TAGS: thermoregulator, nuclear magnetic resonance, control circuit, temperature control, gas heat exchanger, spin echo

ABSTRACT: The article describes a device, which uses gaseous heat exchangers, for thermostating specimens in experiments with spin echo. The temperature of the investigated solutions was maintained at 40 to -30C as desired. Nitrogen gas was used as a heat exchanger. Its flow was regulated by changing the current through the heater in a Dewar flask with liquid nitrogen. To minimize the consumption of nitrogen and to achieve lower temperatures, the measuring head with the specimen was separated from the poles of the electromagnet by an air gap. In addition, the poles of the electromagnet are cooled by spiral tubes, placed around the poles, through which water

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ACCESSION NR: AP4034592

is passed. The desired temperature level with accuracy of 0.01 deg. is maintained constant automatically by means of a device consisting of a termister bridge and a regulating potentiometer, PSR-1-0.1. Orig. art. has: 2 figures.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskiy institut im. D.I. Mendeleyeva (Moscow Institute of Chemical Technology)

SUBMITTED: 06Jul63 ENCL: 00

SUB CODE: NP, TD NR REF SOV: 001 OTHER: 001

Card 2/2

ZAGORETS, P.A.; YERMAKOV, V.I.; ORUNAU, A.P.

Study of solutions by high frequency methods and by the nuclear magnetic resonance method. Part 11. Zhur. fiz. khim. 39 no.2: 456-458 F '65. (MIRA 18:4)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyeva.

YERMAKOV, V.I.; ZAGORETS, P.A.

High-frequency studies of electrolyte solutions. Part 9: Role of ionic atmosphere in forming the structure of electrolyte solutions. Effect of temperature on the structure of electrolyte solutions. Zhur. fiz. khim. 38 no.12:2968-2971 D '64. (MIRA 18:2)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I. Mendeleyeva.

YERMAKOV, V.I.; MARTYUSHIN, I.G.

Investigating the gas content of a bubbling layer for processes with solid phase participation. Khim. prom. 42 no.9:701-703 S '65. (MIRA 18:9)

ZAGORETS, P.A.; YERMAKOV, V.I.; GRUNAU, A.P.

Study of solutions by the high-frequency methods and by the nuclear magnetic resonance method. Part 12. Zhur.fiz.khim. 39 no.7:1552-1555 Jl '65. (MIRA 18:8)

1. Khimiko-tekhnologicheskiy institut imeni D.I.Mendeleyeva.

YERMAKOV, V.I., [illegible], A.E., ZAGORETS, D.S.

Capacity [illegible] for radiochemical analysis. Zhur. fiz. i khim. 35 no.6:1329-1331 Je '61. (MIRA 14:6)

1. Moskovskiy khimiko-tekhnologicheskiy [illegible] im. Mendeleyeva. Submitted March 11, 1960.

ACC NR: AP7002707 (A) SOURCE CODE: UR/0115/66/000/012/0051/0053

AUTHOR: Yermakov, V. I.; Zemskov, Ye. M.; Sachkov, V. I.

ORG: none

TITLE: Some relations characterizing the beam path in a cesium frequency standard

SOURCE: Izmeritel'naya tekhnika, no. 12, 1966, 51-53

TOPIC TAGS: frequency standard, cesium, frequency control standard, atomic clock

ABSTRACT: Early authors' experiments with the cesium atomic-beam frequency standard involved a collimating diaphragm and were found to be unwieldy. Hence, further experiments were conducted without collimators, their functions being performed by beam slits cut in the resonators. Formulas are deduced which impose certain conditions on the widths of the slits in the resonators, source, and detector and also on the field gradient of the deflecting magnets. These conditions make possible successful operation of the frequency standard not equipped with the collimating diaphragm and having symmetrical beam deflection. These relations are derived: detector slit width

$$b_д + \frac{l_0}{l_1 + l_2 + l_3 + l_4}\, b_р < \frac{4M_{эфф}\nabla B}{3m\omega^2}\, l_3\left(\frac{l_3}{2} + l_4\right)$$

$$b_д = 2b_к + b_и.$$

$$b_р < \left[\frac{4M_{эфф}\nabla B}{3m\omega^2}\, l_3\left(\frac{l_3}{2} + l_4\right) - b_и\right]\frac{l_1 + l_2 + l_3 + l_4}{l_0},$$

Card 1/2 UDC: 621.373.(083.76):546.36

ACC NR: AP7002707

The beam can be limited either by the first (from the source) or by the second resonator. If $b_n + b_p < \frac{a l_1}{v^2}(2l_1 + l_2)$, the first resonator places the limitation; if $b_n + b_p > \frac{a l_1}{v^2}(2l_1 + l_2)$, the scond. Here, b_n - source slit width and b_p - resonator slit width. Actually, both resonator slits act simultaneously as the beam contains atoms that have different speeds. Orig. art. has: 2 figures and 24 formulas.

SUB CODE: 09, 20 / SUBM DATE: 21Jul66 / ORIG REF: 000 / OTH REF: 001

Card 2/2

SHILOV, Yu.M., kand. farm. nauk; DARAGAN, V.L.; YERMAKOV, V.I., kand. khim. nauk

High-frequency device for the determination of moisture in samples of loose preparations. Sbor. nauch. trud. TSANII 6: 127-133 '64. (MIRA 19:1)

1. TSentral'nyy aptechnyy nauchno-issledovatel'skiy institut (for Shilov, Daragan). 2. Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyeva (for Yermakov).

ZAGORETS, P.A.; YERMAKOV, V.I.; GRUNAU, A.P. (Moskva)

Study of solutiond by high-frequency methods and by the method of nuclear magnetic resonance. Part 10. Zhur. fiz. khim. 39 no. 1:9-12 Ja '65 (MIRA 19:1)

1. Khimiko-tekhnicheskiy institut imeni D.I. Mendeleyeva, Moskva. Submitted June 26, 1964.

YERMAKOV, V.I.

Relation of the composition of Lower Cretaceous natural gases in the Northern Caucasus to the metamorphosing degree of formation waters. Dokl. AN SSSR 165 no.4:923-926 D '65. (MIRA 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut prirodnogo gaza. Submitted March 16, 1965.

YERMAKOV, V.I.

Zonal distribution of diluted gases of the Lower Cretaceous aquiferous complex of Ciscaucasia. Dokl. AN SSSR 161 no.2: 447-450 Mr '65. (MIRA 18:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut prirodnogo gaza. Submitted June 13, 1964.

VASIL'YEV, Ye.A., red.; YERMAKOV, V.I., red.; KALUZHSKIY, N.A., red.; KOMSHILOV, N.F., red.; MATYUSHKINA, A.P., red.; KIKIIOV, G.V., red.; RAYEVSKAYA, V.S., red.; SHCHEMELEVA, A.V., red.

[Materials of the Conference on the Overall Use of Wood] Materialy Konferentsii po kompleksnomu ispol'zovaniiu drevesiny. Petrozavodsk, Karel'skoe knizhnoe izd-vo, 1964. 306 p. (MIRA 18:1)

1. Konferentsiya po kompleksnomu ispol'zovaniyu drevesiny, Petrozavodsk, 1961.

1. MUSTEL', P. I. ; YERMAKOV, V. K. Eng.; MINAS'YAN, V. P.,Eng.; DZASOKHOV, A. KH.

2. USSR (600)

4. Mine ventilation

7. "Mine ventilation." Reviewed by P. I, Mustel', V. K. , Yermakov, V. P., Eng., Minas'yan, Gor. zhur. no. 11, 1952

9. Monthly List of Russian Accessions, Library of Congress, _____1953. Unclassified.

YERMAKOV, V.K.; SHUR, A.S.

Porous structure of magnetite from ferruginous quartzites of the Urals and southern Siberia. Zap.Vses.min.ob-va 84 no.4:454-459 '55. (MLRA 9:2)
(Ural Mountains--Magnetite) (Siberia--Magnetite)

YERMAKOV, V.K.

Composition and genesis of Pre-Cambrian ferruginous quartzites on the western slope of the Southern Urals. Trudy Gor.-geol. inst. UFAN SSSR no.40:67-80 '59. (MIRA 13:11)
(Ural Mountains--Quartzite)

YEMELYANOV, V. N. --

"The Legal-Medical Significance of Parasitic Invasions,"
Cand Med Sci, First Moscow Order of Lenin Medical Inst,
1 Nov 54, (VM, 20 Oct 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (10)

SO: Sum. No. 481, 5 May 55

YERMAKOV, V. M., GONCHAROV, V. P., and VDOBIN, I. T.

"The Effect of Neuroplegic Mixtures on the Ability of Animals to Withstand Oxygen Starvation and Burn Shock," from the book **Theses** of the Reports of the Scientific Session of the Military Medical Academy im. s. M. Kirov, Tezisy Dokladov Nauchnoy Sessi, 29 Oct-2 Nov 1956, Leningrad.

YERMAKOV, V.M., kand.med.nauk

Fatal outcome following invasion of the upper respiratory tract by ascarids. Vest.oto.-rin. 20 no.3:74-76 My-Je '58 (MIRA 11:6)

1. Iz kafedry sudebnoy meditsiny (zav. - prof. V.F. Chervakov) I Moskovskogo meditsinskogo instituta.
(ASCARIDS
upper resp. tract (Rus))
(RESPIRATORY TRACT, dis
ascariasis of upper tract (Rus))

YERMAKOV, V. M.

"An Approach to the Problem of Natural Focalization of Trichinosis."

Tenth Conference on Parasitological Problems and Diseases with Natural Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of Sciences, USSR, Moscow-Leningrad, 1959.

First Moscow Medical Institute

YERMAKOV, V.M., kand.med.nauk

Cysticercosis in children. Pediatriia 38 no.10:64-68 O '60.
(MIRA 13:11)

1. Iz kafedry obshchey biologii (zav. - zhlen-korrespondent AMN SSSR prof. F.F. Talyzin) i kafedry sudebnoy meditsiny (zav. - zasluzhennyy deyatel' nauki RSFSR prof. V.F. Chervakov) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova (dir. - prof. Kovanov, V.V.)
(CYSTICERCOSIS)

YERMAKOV, V.M.; KUKLINA, N.V.

In the Atkar Production Administration. Zashch. rast. ot vred. i bol. 9 no.3:5-7 '64. (MIRA 17:4)

1. Glavnyy agronom Atkarskogo proizvodstvennogo upravleniya, Saratovskoy oblasti (for Yermakov). 2. Nachal'nik otryada po zashchite rasteniy Atkarskogo proizvodstvennogo upravleniya, Saratovskoy oblasti (for Kuklina).

22545

1/10 ... 11, 1013, 014 S/129/61/000/005/001/003
E111/E152

AUTHORS: Totok, Ya.B., Candidate of Technical Sciences, Orzhekhovskiy, Yu.F., Candidate of Technical Sciences, Fevzner, L.M., Candidate of Technical Sciences, Roshchina, I.N., Engineer, and Yermakov, V.N., Engineer.

TITLE: Thermal-mechanical treatment of steel to give high strength

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov, 1961, No.5, pp. 2-9

TEXT: The authors point out that recently much attention has been given to combined mechanical and head treatment, by two possible methods. In one method the steel is rapidly deformed in the austenite-stable temperature range and quenched. While this improves the steel in many ways it fails to increase tensile strength. In the second method the steel is deformed at a temperature between the martensite point M_d and the recrystallization temperature, and quenched. This gives increased strength with satisfactory plasticity. Results of thermal-mechanical

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4

Thermal-mechanical treatment of steel to give high strength

treatment are not universally successful, and there are no reliable data on the practical use of the "ausform" or "ausforming" treatment widely advertised in the USA. The object of the present work was the study of thermal-mechanical treatment of alloy structural steels to a high strength and the structure produced by the treatment. The composition of the steels was as shown in Table 1, steels A-Г being melted in induction and Д and E in arc furnaces; the first group were austenitized at 1000, the second at 900 °C. After cooling in a nitrate bath to the deformation temperature the steels were rolled in 4-5 passes (reduction 90%), oil-quenched and tempered. To reduce cooling the work was reheated between passes and other measures taken, e.g. rolls were preheated to 100 °C. A portable magnetic instrument (developed by G.Yu. Sila-Novitskiy and T.D. Kutyshkina) was used to detect isothermal-decomposition products; if found, the specimen was rejected. After treatment specimens had a hardness R_C of 58-64 and mechanical-test pieces were prepared by spark machining and removal by grinding (temperature kept below 100 °C)

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E111/E152

Thermal-mechanical treatment of steel to give high strength

of a 0.5 mm deep surface layer. Fig.2 shows tensile strength kg/mm^2 and relative elongation as functions of carbon content for steels A, B, Д and E after treatment (90% deformation at 550 °C, 4 hours tempering at 100 °C); for steel A tempering at 100 and 200 °C is shown by points 1 and 2 respectively, steels E and Д indicated by point 3. Fig.3 shows for steel Д tensile strength and elongation in relation to the 90% deformation temperature (tempering at 100 °C). The effect of variation in austenitization temperature with 90% deformation and tempering at 100 °C of steel A on tensile strength, Rockwell hardness and elongation is shown in Fig.4. Fig.5 shows the effect of tempering temperature on these properties of the normally thermomechanically treated alloys B and Г (left- and right-hand graphs respectively). The treatment enabled a tensile strength of 280-300 kg/mm^2 and elongation of 6% to be obtained for the steels tested, which is better than with ordinary or stepwise hardening followed by low-temperature tempering. As carbon content rises to about 0.5% strength of thermomechanically treated steels rises, and falls with higher

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E111/E152

Thermal-mechanical treatment of steel to give high strength

C content due to semi-brittle or brittle fracture. The best strength/plasticity combination was obtained with tempering at 100 °C. In some experiments on steel 6 the deformation was decreased to 50%; the results were less favourable than with the 90% deformation as regards strength, but gave high plasticity. The advantage of 50% deformation is that it can be effected at relatively high temperatures, even above the recrystallization temperature. Bend tests on 60 x 10 x 2 mm plates of steel 6 heated in various ways were also carried out. Electron-microscopic study of the fine structure of thermomechanically treated steel A showed a pronounced texture and considerable refinement of martensite plates. X-ray diffraction by rotating specimens was also studied (with a UPC-50M (URS-50I) ionization apparatus with automatic recording of intensity distribution in $Fe K_{\alpha}$ radiation): block size of the thermomechanically treated steel was one half to one quarter that obtained with ordinary hardening. The authors conclude that structure refinement is one factor in the effectiveness of the treatment.
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22545

S/129/61/000/005/001/003
E111/E152

Thermal-mechanical treatment of steel to give high strength

V.V. Chugunov, K.S. Medvedeva, G.G. Solov'yeva, Ye.G. Filippova, T.D. Kubyshkina, V.V. Bol'shakova and Yu.N. Kabanov participated in the work.

There are 8 figures, 4 tables and 21 references: 13 Soviet and 8 English. The four latest English language references read:

Ref.8: E.B. Kula, J.M. Dhosi, "TASM", v. 52, 1960.

Ref.11: D.J. Schmatz, V.F. Zackay, "TASM", v. 51, 1959.

Ref.12: D.J. Schmatz, J.C. Shyne, V.F. Zackay, "Metal Progress", v.76, No.3, 1959.

Ref.13: J.C. Shyne, V.F. Zackay, D.J. Schmatz, "TASM", v.53, 1960.

Card 5/5

YERMAKOV, V.N.

POTAK, I. M.[Potak, Ya.M.]; ORJEHOVSKI, I. F.[Orzhekhovskiy, Yu. F.]; PEVZNER, L. M.; ROSCINA, I. N.[Roshchina, I. N.]; ERMAKOV, V.N. [Yermakov, V. N.]

Thermomechanical treatment of steel for the obtainment of a high mechanical resistance. Analele metalurgie 15 no.4:114-123 O-D '61.

(Steel—Heat treatment)

POTAK, Ya.M., kand.tekhn.nauk; ORZHEKHOVSKIY, Yu.F., kand.tekhn.nauk; PEVZNER, L.M., kand.tekhn.nauk; ROSHCHINA, I.N., inzh.; YERMAKOV, V.N., inzh.

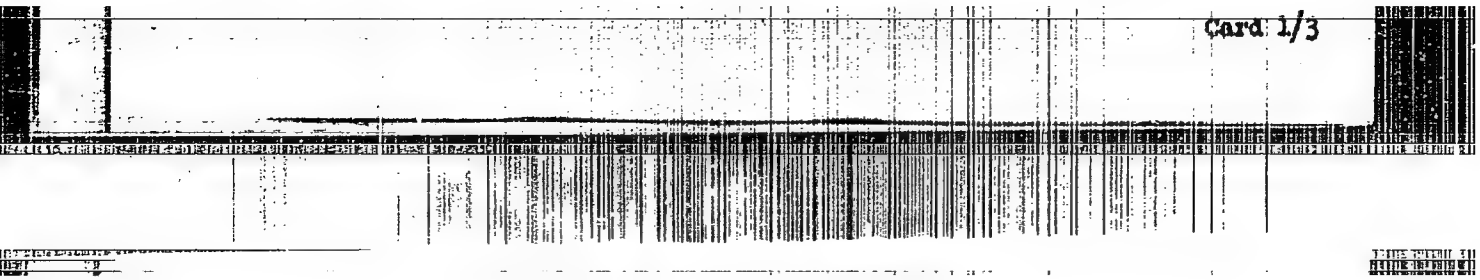
Thermal and mechanical treatment of steel for higher strength. Metalloved. i term. obr. met. no.5:2-9 My '61. (MIRA 14:5)
(Steel, Structural—Hardening)

Yermakov, V.N.

AID Nr. 977-2 27 May

AUSFORMING OF STRUCTURAL STEELS (USSR)

Yermakov, V. N., V. V. Chugunov, and Yu. F. Orzhekhovskiy. Metallovedeniye i termicheskaya obrabotka metallov, no. 4, Apr 1963, 25-29.
S/129/63/000/004/006/014



and 12 and 13, steel 4 remelted in a consumable-electrode vacuum arc furnace. The ausforming consisted of austenitizing at 1000°C, saltpeter bath or furnace cooling to 500°C, rolling in 5 to 7 passes with a total reduction of 90%, and oil quenching. This was followed by tempering at 100, 200, 300, or 400°C for 3 hrs. The specimens were encased in X8CrNiT stainless steel envelopes; rolls were preheated to 60-100°C. In all steels the best combination of strength and ductility -- tensile strength σ_b of 280-290 kg/mm^2 and elongation of δ = 6 to 9% -- was obtained by tempering at 100°C. Remelted steels generally were found to have higher strength and ductility. After tempering at 100°C the induction-melted steels had a yield strength $\sigma_{0.2}$ of 200.5 kg/mm^2, σ_b = 266.5 kg/mm^2, δ = 8.8%. In remelted steels (except for steels vacuum-remelted in a magnetic field, σ_b varied from 280 to 290 kg/mm^2, $\sigma_{0.2}$ from 180 to 210 kg/mm^2, and δ from 6 to 10%. Steels conventionally hardened and tempered at 100°C in many cases showed partial brittle failure. Short-time

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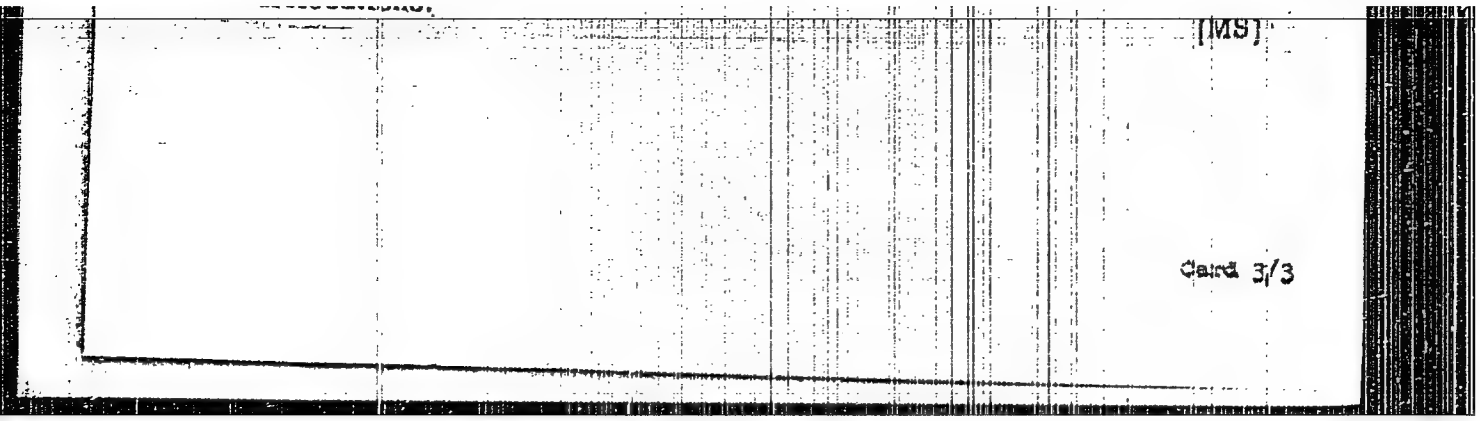
AID Nr. 977-2 27 May

AUSFORMING OF STRUCTURAL STEELS [Cont'd] S/129/63/000/004/006/014

tests at elevated temperature showed that ausformed steel with 0.28% V is more heat resistant at temperatures up to 400-500°C than steel without V. Ausforming results in a considerable antigravity-c



EXCERPTA MEDICA Sec 9 Vol 13/6 Surgery June 59

3031. (879) INTRA-AORTIC BLOOD TRANSFUSION (Russian text) - Ermakov V. S. - KHIRURGIYA 1958, 11 (23-27) Illus. 1

A series of cases is presented in which transfusions into the abdominal aorta were employed. The method was used in grave surgical shock and in blood loss. A good and stable effect was seen in 7 out of 14 patients who recovered. An effect of short duration was obtained in 2 patients. The observations show that the intra-aortic transfusion is a powerful therapeutic measure which may be employed in prophylaxis and in combating severe shock. The rise of arterial blood pressure, improvement of the cardiac activity and respiration appeared directly after the injection of the first portions of the blood. The total amount of blood injected in shock was 70-140 ml., while in shock combined with blood loss it was 250-300 ml. A special method for the intra-aortic blood transfusion, which enables to control the aortic blood pressure and, consequently, to determine the required amount of blood for the achievement of the effect is suggested.

Faculty Surgery Clinic, Kuban Med Inst.

YERMAKOV, V. S., Cand Med Sci -- (diss) "Discontinuous and momentary intra-arterial blood transfusion." Saratov, 1960. 11 pp; (Ministry of Public Health RSFSR, Saratov State Medical Inst); 200 copies; price not given; (KL, 26-60, 143)

YERMAKOV, V. S.

18047

"Azerbaydzhan Power System on the Eighteenth Anniversary of the Great October Revolution," V. S. Yermakov, Engr, 1 p

"Elek Stantsii" Vol XVIII, No 11

Describes achievements and growth of Azerbaydzhan power system; progressive electrification and expansion. Mentions important personalities. Gives data on current plan performance.

18047

L 5078-66 EPA(a)-2/EWT(m)/EPF(n)-2/EWP(t)/EWP(b) IJP(c) JD/DM

ACC NR: AP5022625 UR/0089/65/019/002/0109/0113

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B

AUTHOR: Donets, Ye. D.; Shchegolev, V. A.; Yermakov, V. A.

TITLE: Synthesis of the isotope of mass 256 of the 102-nd element (lawrencium)

SOURCE: Atomnaya energiya, v. 18, no. 2, 1965, 109-113

TOPIC TAGS: lawrencium, transuranium elements

ABSTRACT: After a brief review of the discovery, in 1961, of lawrencium of an isotope mass 257, the authors present the results of their own identification of a new isotope of mass 256 of the same element. The experiments were conducted at the Joint Institute for Nuclear Research, in Dubna, by using the interior beam of multiply charged ions of the 3-meter cyclotron. The new isotope was synthetized from the nuclear reaction of $_{95}Am^{243}(_{8}O^{18}, 5n)_{103}Lw^{256}$. The isotope was identified by the $_{100}Fm^{252}$ isotope. This end product was obtained as a result of a $_{101}Mv^{256}$ electron capture and a $_{103}Lw^{256}$ alpha decay. The new 256-isotope was identified by the same method which had been used by the authors for the identification of the isotope 256 of the 102-nd element (Atomnaya Energiya, 16, 195 (1964)). The arrangement used for the synthesis of $_{103}Lw^{256}$ and the build-up of $_{100}Fm^{252}$ is schematically illustrated in the

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L 5078-66

ACC NR: AP5022625

article. Spectrometers having a resolution of about 60 kev and a very low background were used. The experiments involved bombarding (8 to 12 hours) a $^{243}_{95}Am$ target with accelerated $^{18}_{8}O$ ions. The alpha-spectrum of accumulated Fm-products is graphically presented. The half-life of alpha activity at E=7.04 Mev was about 25 hours. It was experimentally shown that the σ x 10^{-32} sq cm cross-section needed for the formation of Lw-256 isotope was attained at the energy level of 96 Mev. The experiments measuring the half-life of the 256-isotope are described. The half-life time was close to 45 sec. In conclusion, the radioactive properties of this new isotope were summarized and the character of the cross-section of the reaction $^{243}_{95}Am(^{18}_{8}O, 5n)^{256}_{103}Lw$ was evaluated.

The authors wish to acknowledge with gratitude the assistance given to them by G. N. Flerov (general consultation), A. N. Filippov (cyclotron operation), L. Kumpf and A. M. Sukhov (electron equipment), A. G. Pil'kov (mechanical arrangements), E. Z. Ryndina and V. N. Kushniruk (semiconductor detectors), V. I. Kuznetsov, A. G. Kozlov and A. P. Smirnov-Averin (general assistance). The last two persons belonged to

Card 2/3

L 5078-66
ACC NR: AP5022625

the staff of the Institute of physics and power of the State committee for utilization of atomic energy. Orig. art. has: 2 diagrams and 4 graphs.

ASSOCIATION: none

SUBMITTED: 20Apr65 ENCL: 00 SUB CODE: NP

NO REF SOV: 003 OTHER: 001

Card 3/3

GUSHCHENKO, I.I.; DUBIK, Yu.M.; YERMAKOV, V.A.

Terminal eruption of the Klyuchevskiy Volcano in 1962-1963.
Biul. vulk. sta. no.37:37-51 '64. (MIRA 18:3)

YERMAKOV, V.A., inzhener.

Pneumatically operated doors in drying chambers. Der. prom. 6 no.5: 21-22 My '57. (MLRA 10:6)

1. Rostovskaya na Donu fabrika myagkoy mebeli.
(Drying apparatus) (Pneumatic control)

YERMAKOV, V.A.

Prospecting for new petroleum fields in Krasnodar Territory. Geol. nefti i gaza 5 no.6:16-20 Je '61. (MIRA 14:6)

1. Trest Krasnodarnefterazvedka.
(Krasnodar Territory--Petroleum geology)

YEGOYAN, V.L.; YERMAKOV, V.A.; KIYKO, K.I.

Discovery of upper Triassic marine deposits in the Teysk-Berezanskiy area of southwestern Ciscaucasia. Dokl.AN SSSR 138 no.6:1417-1420 Je '61. (MIRA 14:6)

1. Upravleniye neftyanoy i gazovoy promyshlennosti "Krasnodarneft'."
2. Predstavleno akademikom A.L.Yanshinym.
(Teysk region--Geology, Stratigraphic)
(Berezanskiy region--Geology, Stratigraphic)

YERMAKOV, V.A.

New gas-condensate field in Krasnodar Territory. Geol.nefti i gaza 6 no.5:59-60 My '62. (MIRA 15:5)

1. Krasnodarskiy trest po neftyanoy geologicheskoy razvedke. (Krasnodar Territory—Condensate oil wells)

YERMAKOV, V.A., inzh.

Load capacity of plastic gear wheels. Vest.mashinostr. 42 no.5:48-53 My '62. (MIRA 15:5)
(Gearing) (Plastics)

YERMAKOV, V.A.

Reconstruction of drying chambers at the Rostov furniture plant. Der.i lesokhim. prom. 3 no.4:20-21 Ap '54. (MLRA 7:5)

1. Glavnyy inzhener Rostovskoy n/D fabriki myagkoy mebeli.
(Rostov--Lumber--Drying) (Lumber--Drying--Rostov)

YERMAKOV, V.A.

Outlook for finding oil and gas in Ust'-Labinsk District, Krasnodar Territory. Neftegaz. geol. i geofiz. no.3:9-12 '63. (MIRA 16:8)

1. Krasnodarskiy trest po neftyanoy geologicheskoy razvedke.

ACCESSION NR: AP4020324 S/0089/64/016/003/0195/0207

AUTHOR: Donets, Ye. D.; Shchegolev, V. A.; Yermakov, V. A.

TITLE: Synthesis of the isotope of element 102 with mass number 256

SOURCE: Atomnaya energiya, v. 16, no. 3, 1964, 195-207

TOPIC TAGS: element 102, mass number 256, nuclear reaction, transuranium element, decay period, energy dependence, U sup 238

ABSTRACT: In the nuclear reaction U^{238} (Ne^{22}, 4n)102^{256} (a-active isotope of element 102 with mass number 256) is synthesized. The registration and identification of the isotope is made according to the daughter isotope Fm^{252}. The measured half-lifeperiod of 102^{256} is about 8 sec. The energy dependence of the cross section for the formation of isotope 102^{256} in the reaction U^{238} + Ne^{22} is studied. Its maximum is in the area of 112 Mev. The cross section at the maximum reaches about 4.5×10^{-32} cm^2. The work was carried out in an internal beam of the trimeter cyclotron of the nuclear reaction laboratory of the Joint Institute for Nuclear Research. "In conclusion, we are deeply grateful to

Card 1/2

ACCESSION NR: AP4020324

G. N. Flerov with whose guidance and warm participation this work was accomplished. We also thank the subdivision leaders Yu. Ts. Oganesyan, A. N. Filipson and A. S. Pasyuk for providing so many intensive beams of accelerated neon ions for our experiments." Orig.art. has: 13 figures.

ASSOCIATION: None

SUBMITTED: 18Nov63 DATE ACQ: 31Mar64 ENCL: 00

SUB CODE: NS, PH NO REF SOV: 012 OTHER: 008

Card 2/2

BRANDSHTETR, I.; VOLKOV, V.V.; YERMAKOV, V.A.; ZVAROVA, T.S.;
KRZHIVANEK, M.; MALY, Ya.; SU KHUN-GUY [Su Hung-kuei]

Study of the products of reactions of heavy elements with multicharge ions. Part 2: Yield of some isotopes of californium and fermium during the irradiation of thorium and uranium by O^{16}, O^{18}, and Ne^{22} ions. Radiokhimiia 5 no. 6:706-711 '63. (MIRA 17:7)

BRANDSHTETR, I.; WAN TUN-SEN; YERMAKOV, V.A.; ZVARA, I.; IVANOVA, T.S.; KNOBLOKH, V.; KRZHIVANEK, M.; MALY, Ya.; SU KHUN-GUY [Su Hung-kuei]

Determination of the yield of some fragments in the fission of heavy nuclei induced by multicharge ions Part 1: Fission of Th^{232} induced by O^{18} and Ne^{22} ions. Radiokhimiia 5 no. 6: 715-720 '63. (MIRA 17:7)

L 00037-66 EWT(m) DIAAP

ACCESSION NR: AP5020306 UR/0186/65/007/004/0453/0461

AUTHOR: Dedov, V. B.; Volkov, V. V.; Gvozdev, B. A.; Yermakov, V. A.; Lebedev, K. A.; Razbitnoy, V. M.; Trukhlyayev, P. S.; Chuburkov, Yu. T.; Yakovlev, G. N.

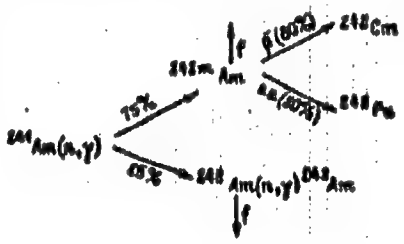
TITLE: Production of Pu-242 and Cm-242 from neutron-irradiated Am-241

79, 25 B

SOURCE: Radiokhimiya, v. 7, no. 4, 1965, 453-461

TOPIC TAGS: plutonium, curium, americium, extraction, neutron irradiation

ABSTRACT: Irradiation of Am-242 with thermal neutrons produces Pu^{242}, Cm^{242} and Am^{243} which are of great interest in a number of physical and radiochemical investigations. The synthesis scheme is as follows:



Card 1/2

L 00037-66
ACCESSION NR: AP5020306

The thermal neutron cross section of Am^{241} is 900 barn, thus even upon short irradiation with a high density thermal-neutron beam a significant amount of the above isotopes may be produced. It can be seen from the above process that the yield of fission products is small since they are produced mainly during fission of Am^{242}. This facilitates the chemical processing of irradiated substances. Production of Pu^{242} by this process requires much less time than the method which uses Pu^{239} as starting material. The authors describe the chemical separation of Pu^{242}, Cm^{242} and Am^{243} from irradiated Am^{241}. The scheme for the chemical processing was selected to be such that it would produce rapid separation of the products. The main separation steps involved chromatographic and chemical extraction methods. Chromatographic separation was made extremely difficult by high α-activity due to the presence of Cm^{242}. Chemical processing was carried out in a shielded area on a special stand with remote control of all operations. The article indicates some properties of curium oxalate, potassium curium sulfate, curium hydroxide and curium carbonate. Orig. art. has: 5 tables and 3 figures.

ASSOCIATION: none

SUBMITTED: 18Apr64 ENCL: 00 SUB CODE: GC, NP

NO REF SOV: 004 OTHER: 005

Card 2/2

DONETS, Ye.D.; SHCHEGOLEV, V.A.; YERMAKOV, V.A.

Synthesis of the 103d element (lawrencium) with mass number 256. Atom. energ. 19 no.2:109-113 Ag '65. (MIRA 18:9)

YERMAKOV, V. F.

YERMAKOV, V. F. "Investigation of the Effect of Fuel Temperature on the Working Cycle of a High-Speed Engine with Compression Ignition." Min River Fleet USSR. Leningrad Inst of Water Transport Engineers. Leningrad, 1956. (Dissertation for the Degree of Candidate in Technical Sciences)

So: Knizhaya Letopis', No. 17, 1956

KHANDOV, Z.A., doktor tekhn.nauk, prof.; YERMAKOV, V.P., kand.tekhn.nauk

Characteristics of diesel cycles with fuel additions to the air charge being compressed. Trudy LIVT no.2:3-22 '60.
(MIRA 15:3)

(Marine diesel engines)

YERMAKOV, V.F., kand.tekhn.nauk

Investigating the atomizing of heated diesel fuel. Trudy LIVT no.2:23-28 '60. (MIRA 15:3)
(Marine diesel engines) (Diesel fuels)

KHANDOV, Z.A., doktor tekhn.nauk, prof.; YERMAKOV, V.F., kand.tekhn. nauk

Investigating the feasibility of improving the operations of 3D6 engines. Trudy LIVT no.12:3-10 '61. (MIRA 14:9)
(Marine engines)

ACC NR: AR7004111 (4N) SOURCE CODE: UR/0169/66/000/012/V050/V050

AUTHOR: Vyalov, S. S.; Yermakov, V. F.

TITLE: Decrease in the strength of ice with time

SOURCE: Ref. zh. Geofizika, Abs. 12V328

REF SOURCE: Tr. koordinats. soveshchaniy po gidrotekhn., vyp. 23, 1965, 89-99

TOPIC TAGS: glaciology, ice strength, dynamometer, ice rheology, elasticity, rheologic property, ice, plastic deformation, plastic strength

ABSTRACT: A new method of determining the rheological properties of ice using a dynamometric device is examined. The purpose of the method is to accelerate and simplify testing procedures. The test is conducted by measuring the initial load applied to the specimen from the tension on an elastic dynamometer. The stress transmitted to the sample through the dynamometer, produces in the sample creep deformation which, in turn, causes the dynamometer to relax and reduce the stress. The reduction of stress will continue, under any given stress, until the sample's deformation achieves stabilization, i. e., until a state of equilibrium is attained between the load applied to the sample through the dynamometer and the

Card 1/2 UDC: 551.32:63

ACC NR: AR7004111

internal resistance of the ice. If the initial strain applied to the sample is approximately equal to the assumed-instantaneous strength, then the stabilization of deformation will correspond to the limiting equilibrium. Since ice does not have stress-rupture strength, a nominative value of relative deformation for a specific length of time may be regarded as the deformation stabilization. Dynamometer testing may be regarded as creep tests with stress varying with time; changes in stress and deformation are interdependent. The proposed method is recommended for conducting tests under different loads (compression, rupture, shear). In conclusion, data obtained in testing samples of polycrystalline glacier and lacustrine ice (Mirnyy, Antarctica), using the dynamometer, are presented. A bibliography of 5 titles is included. G. Deyev. [Translation of abstract]

SUB CODE: 08/ [SP]

Card 2/2

KHANDOV, Zosima Aleksandrovich; YERMAKOV, Vasiliy Fedorovich; BOTKIN, P.P., kand. tekhn. nauk, retsenzent; AL'TMAN, I.R., inzh., retsenzent; ZAKHARENKO, B.A., nauchn. red.; VASIL'YEVA, N.N., red.; KRYAKOVA, D.I., tekhn. red.

[Marine diesel engine operations with a two-stage fuel feed] Rabota sudovogo dizelia s dvukhfaznoi podachei topliva. Leningrad, Sudpromgiz, 1963. 82 p. (MIRA 16:12)
(Marine diesel engines)

ODINTSOV, M.M., doktor geol.-min. nauk, otv. red.; PAL'SHIN, G.B., kand. geol.-min. nauk, red.; LOGACHEV, N.A., red.; PINNEKER, Ye.V., red.; GRECHISHCHEV, Ye.K., kand. tekhn. nauk, red.; ASTRAKHANTSEV, V.I., red.; VOLOGODSKIY, G.P., red.; KUKUSHKIN, I.P., red.; FEDOROV, I.P., red.; TIZDEL', R.R., red.; SEDOVA, N.G., red.; YERMAKOV, V.F., red.; ASTAF'YEVA, G.A., tekhn. red.; POLYAKOVA, T.V., tekhn. red.

[Bratsk Reservoir; engineering geology of the territory] Bratskoe vodokhranilishche; inzhenernaia geologiia territorii. Moskva, Izd-vo AN SSSR, 1963. 274 p. (MIRA 16:12)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye. Institut zemnoy kory.
(Bratsk Reservoir region--Engineering geology)

YERMAKOV, V.G., kandidat tekhnicheskikh nauk.

Application of the theory of jets to the process of ejection. [Trudy] TSKTI 12:109-118 '49. (MLRA 8:4)
(Jets) (Flame)

BABENKO, Kh.L., kand.tekhn.nauk; YERMAKOV, V.G.

Testing of the blading of a steam turbine with opunterpressure.
Energomashinostroenie 7 no.8:12-15 Ag '61. (MIRA 14:10)
(Steam turbines--Blades)

YERMAKOV, V.G., inzh.; ABRAMOV, V.F., inzh.

Mechanism for turning boring rods. Bezop.truda v prom. 5 no.12:31 D '61. (MIRA 15:1)

1. Trest Artemgeologiya.

(Boring machinery)

PIS'MEN, M.K.; YERMAKOV, V.G.; BELYANIN, Yu.I.; YAROSLAV, T.Ye.

Experimental pyrolysis of mazut and shale tar. Gaz. prom. 6 no.11: 18-22 '61. (MIRA 15:1)

(Pyrolysis) (Mazut)

SOV/81-59-5-16825

Translation from: Referativnyy zhurnal, Khimiya, 1959, Nr 5, p 455 (USSR)

AUTHOR: Yermakov, V.G.

TITLE: The Production of Industrial Gases by the Gasification Method of Lean Fuels With Removal of Slags in the Liquid State

PERIODICAL: V sb.: Gazifik. tverdogo topliva. Moscow, Gostoptekhizdat, 1957, pp 122 - 126; V sb.: Khim. pererabotka topliva. Moscow, AS USSR, 1957, pp 400 - 407

ABSTRACT: The results are given of the gasification of Silesia coal semi-coke in a gas generator for the gasification of lump fuel with the discharge of slag in liquid form. Vapor-oxygen (VO) and carbon dioxide-oxygen blowing was used. When using VO blowing a gas is obtained with a total CO and H_2 content of up to 97%, whereby the gasification of the 10 - 50 mm fractions in the fuel is possible. The use of carbon attains the same value as it does

Card 1/2

SOV/81-59-5-16825

The Production of Industrial Gases by the Gasification Method of Lean Fuels With Removal of Slags in the Liquid State

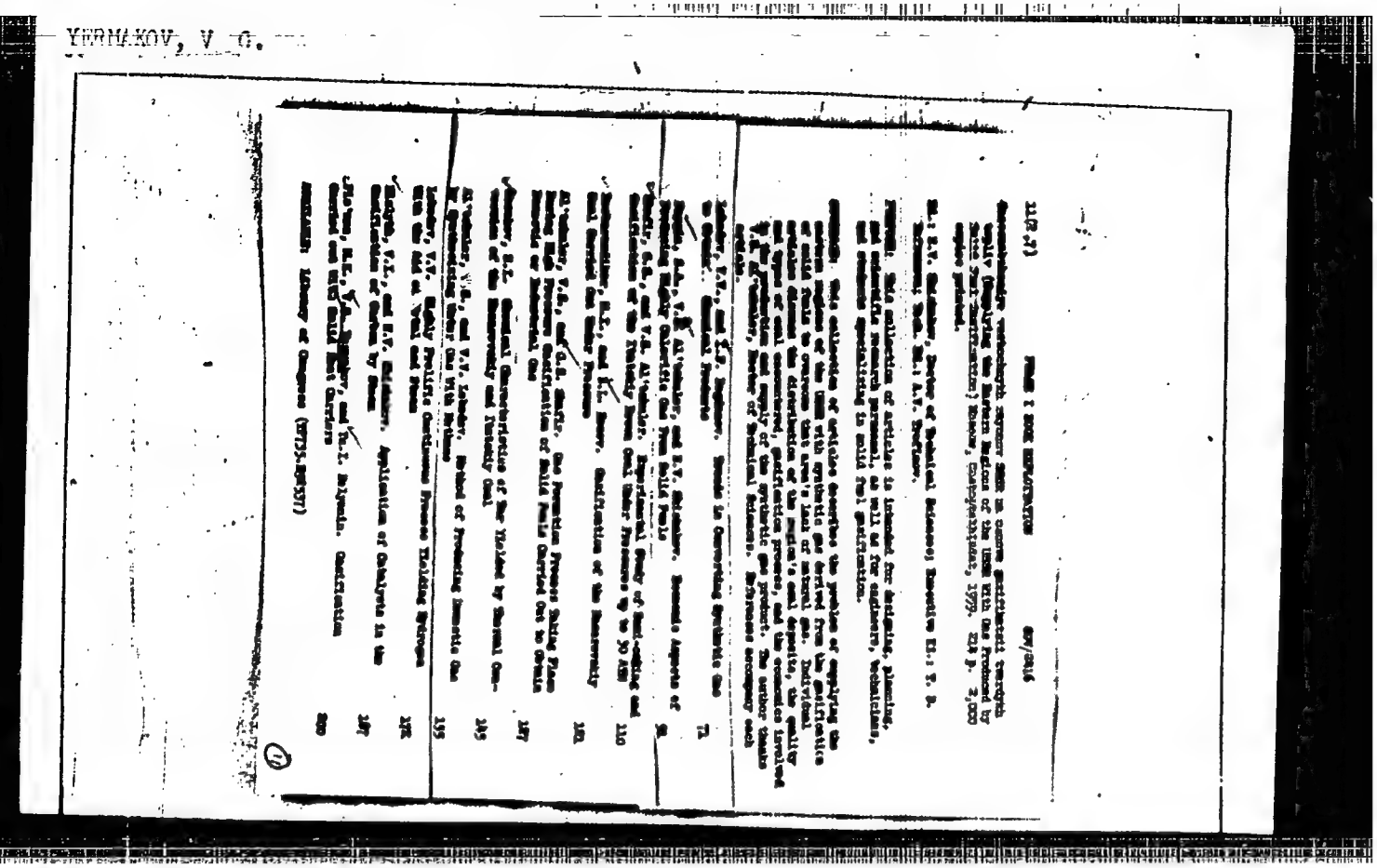
in gasification with discharge of solid slag, but the specific expenditure of vapor for obtaining 1 nm^3 ($CO+H_2$), applying the VO-blowing, is 4 times less.

B. Englin

Card 2/2

PIS'MEN, M.K.; [illegible] BELYANIN, Yu.I.

Gasification of oil shale with a solid heat transfer agent.
Gaz. prom. no.9:21-27 S '58. (MIRA 11:10)
(Gas manufacture and works) (Oil shales)



YERMAKOV, V. G.

YERMAKOV, V.I.; ZAGORETS, P.A.; SMIRNOV, N.I.

Study of solutions by high-frequency methods. Part 1. Zhur. fiz. khim. 36 no.6:1180-1185 Je'62 (MIRA 17:7)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyeva.

YERMAKOV, V. I. Cand Agricult Sci

Dissertation: "Methods for Acclimatization of Sequoia in the Forests of the South Crimea." 29/11/50

Moscow Forestry Inst

SO Vecheryaya Moskva
Sum 71

DIYEV, Nikolay Pavlovich, prof., doktor tekhn.nauk [deceased]; GOFMAN, Irina Petrovna, insh.; SHTEYNGART, G.M., kand.tekhn.nauk, retsenzent; YERMAKOV, V.I., insh., retsenzent; KRAVCHENKO, P.T., insh., retsenzent; GUDIMA, N.V., dotsent, red.; KAMAYEVA, O.M., red.izd-va; ISLAMOVA, P.G., tekhn.red.

[Metallurgy of lead and zinc] Metallurgiia svintsa i tsinka. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1961. 406 p. (MIRA 14:1)
(Lead--Metallurgy) (Zinc--Metallurgy)

YERMAKOV, V.I. (Moscow)

Universal instrument for the high-frequency physicochemical analysis and titration of solutions. Zhur. fiz. khim. 34 no.12:2838-2840 D '60. (MIRA 14:1)

1. Khimiko-tekhnologicheskiy institut imeni D.M. Mendeleyeva, Moskva.
(Titration) (Chemical apparatus)

YERMAKOV, V.I.

Investigation of electrolyte solutions by high-frequency methods. Trudy MKHTI no.38:96-103 '62. (MIRA 16:7)

(Electrolyte solutions)
(Electrochemistry)

YERMAKOV, V.I.; ZAGORETS, P.A.

Investigation of solutions by high frequency methods. Part 3: Characteristic curves of electrical measuring cells and relaxation phenomena in solutions. Zhur.fiz.khim. 36 no.8:1632-1638 Ag '62. (MIRA 15:8)

1. Khimiko-tekhnologicheskiy institut imeni D.I.Mendeleyeva.
(Electrolyte solutions)

YERMAKOV, V.I.

Distribution of the composition of natural gases in Mesozoic sediments in Ciscaucasia. Gaz.prom. no.5:3-7 '63. (MIRA 16:6)
(Caucasus, Northern--Gas, Natural--Analysis)

BEZNOSOV, N.V.; GRISHINA, I.V.; YEFIMAKOV, V.I.

Prospecting for petroleum and gas pools associated with lithological and stratigraphical traps. Geol. nefti i gaza 7 no.3:16-22 Mr '63. (MIRA 16:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut prirodnykh gazov.

(Caucasus, Northern--Petroleum geology)
(Caucasus, Northern--Gas, Natural--Geology)

S/076/63/037/003/004/020
B101/B215

AUTHORS: Yermakov, V. I., Smirnov, N. I., and Zagorets, N. A. (Moscow)

TITLE: Study of solutions by high-frequency methods. VI. Dispersion effects in electrolyte solutions in a wide frequency range of the electromagnetic field

PERIODICAL: Zhurnal fizicheskoy khimii, v. 37, no. 3, 1963, 544-552

TEXT: A non-resonance circuit (Fig. 4) is suggested for measuring the relaxation effects in electrolytes. Measurements were conducted by using the equations $U_3 = \dot{U}kY_{br}/Y_{sol}$ or $Y_{sol} = \dot{U}k\dot{U}_{br}/\dot{U}_3$, where $k = k_2k_I/k_1k_{-I}$, U = voltage, Y = conductivity, the index $_{br}$ being related to the resistance box of the bridge and $_{sol}$ to the electrolyte solution. Measurements with frequencies up to 200 Mc/sec yielded a stepwise course of the curve electroconductivity versus concentration for KCl, $MgCl_2$, and $AlCl_3$. This is explained by steric hindrance effects on reformation of the hydrate complexes with a certain lifetime. Shortlived hydrates are found at

Card 1/2

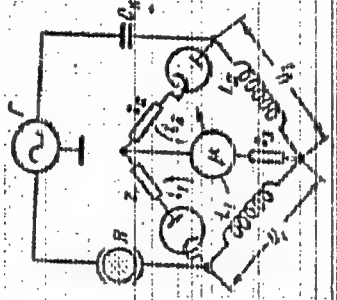
Study of solutions by high-...

frequencies above 10^8 cps, whereas below 1 Mc/sec, only the most stable hydrate shells are observed. There are 8 figures.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskiy institut im. D. I. Mendeleyeva (Moscow Institute of Chemical Technology imeni D. I. Mendeleyev)

SUBMITTED: November 5, 1961

Fig. 4. Principle of a z-meter circuit with high-frequency compensation; legend: Я = cell; Г = generator.



Card 2/2

L 12772-63 EPT(c)/EWT(1)/BDS AFFTC/ASD/ESD-3 Pn-4/Pi-4 OG/IJP(C)/JI'(IJP)
ACCESSION NR: AP3002946 S/0076/63/037/006/1413/1419

AUTHOR: Zagoreta, F. A.; Yermakov, V. I.; Grunau, A. P. 69

TITLE: Investigations of solutions by high frequency and nuclear magnetic re-

echo apparatus

SOURCE: Zhurnal fizicheskoy khimii, v. 37, no. 6, 1963, 1413-1415

TOPIC TAGS: high-frequency method, nuclear magnetic resonance method, spin echo apparatus, spin-lattice relaxation time, $FeCl_3 - UCl_4$

ABSTRACT: A method has been proposed for the relative determination of the

NH sub 4 F. Orig. art. has: 2 figures.

ASSOCIATION: Khimiko-tekhnologicheskiy institut im. D. I. Mendeleyeva (Chemical Engineering Institute)

SUBMITTED: 00 DATE ACQ: 16 Jul 63 ENCL: 00
SUB CODE: 00 NO REF SOV: 005 OTHER: 002

Card 1/1

YERMAKOV, V.I.; NEMCHENKO, N.N.

Possibility of excluding oil- and gas-bearing zones on the basis of data of hydrocarbon analysis. Dokl. AN SSSR 155 no.1:85-87 Mr '64. (MIRA 17:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut prirodnogo gaza. Predstavleno akademikom A.A.Trofimukom.

ERMAKOV, V.I.; SHATSOV, A.N.

Radiometric surveying in oil-bearing regions of western Turkmenia. Geol.nefti 1 no.8:34-39 Ag '57. (MIRA 10:12)

1.Institut nefti AN SSSR.
(Turkmenistan--Petroleum geology)
(Radioactivity--Measurements)

YERMAKOV, V.I.

YERMAKOV, V.I.; ZAKS, L.M.

Work of metrological institutes in the field of radio measurements. (MIRA 10:12)
Izm. tekh. no.6:71-73 N-D '57.
(Radio measurements)

YERMAKOV, V.I.; MASLOV, V.N.; STOLYAROV, O.G.

Application of high-frequency analysis to colloid chemical investigations. Koll.zhur. 19 no.2:198-200 Mr-Ap '57. (MLRA 10:5)

1.Moskovskiy khimiko-tekhnologicheskiy institut im. D.I. Mendeleyeva.
(Colloids) (Electrochemical analysis)

SOV/7-58-7-4/13

21(8)
AUTHORS: Alekseyev, F. A., Yermakov, V. I., Filonov, V. A.

TITLE: Concerning the Content of Radioactive Elements Found in Waters of Oil Field Deposits (K voprosu o soderzhanii radioelementov v vodakh neftyanykh mestorozhdeniy)

PERIODICAL: Geokhimiya, 1958, Nr 7, pp 642-649 (USSR)

ABSTRACT: The content of radium and uranium found in waters of oil field deposits was examined; radium was determined radio-chemically (Ref 3); the content of radon was measured by means of the electrometer [illegible], the amount of uranium ascertained by luminescence. The research was conducted at the Laboratoriya yadernoy geofiziki i geologii Instituta nefti AN SSSR (Laboratory for Nuclear Geophysics of the Petroleum Institute AS USSR). Waters from wells as well as surface water from oil fields of West Turkmenia (Tables 1-3) were examined. Samples were taken from the petrol and mineral gas province of Emba (Kazakhstan) (Tables 4,5) and from oil fields in the Cis-Uralian region (Tables 6-8). Independent of the type of deposit, the radium content ranges from 10^{-10} g/l, seldom under 10^{-11} g/l. The uranium content seldom surmounts 1.0 . 10^{-7} g/l.

Card 1/2

SOV/7-58-7-4 .3

Concerning the Content of Radioactive Elements Found in Waters of Oil .ield Deposits

The largest quantities of radium are to be found in waters of the calcium chloride type. Uranium is concentrated in waters of the sodium bicarbonate type. Radium is found in largest amounts in the marginal zones of the oil field deposits. There are 8 tables and 12 references, 11 of which are Soviet.

ASSOCIATION: Institut nefti AN SSSR, Moskva (Petroleum Institute of the Academy of Sciences, USSR, Moscow)

SUBMITTED: July 7, 1958

Card 2/2

YERMAKOV, V.I.

PHASE I BOOK EXPLOITATION SOV/3600

Yadernaya geofizika; sbornik statey po ispol'zovaniyu radioaktivnykh izlucheniy i izotopov v geologii nefti (Nuclear Geophysics; Collection of Articles on the Use of Radioactive Radiation and Isotopes in Petroleum Geology) Moscow, Gostoptekhizdat, 1959. 370 p. Errata slip inserted. 4,000 copies printed.

Ed.: F.A. Alekseyev, Professor, Doctor of Geological and Mineralogical Sciences; Exec. Ed.: A.P. Sokolov [?]; Tech. Ed.: A.S. Polosina.

PURPOSE: This book is intended for petroleum geologists, geophysicists and scientists engaged in geological research who are interested in radiometric techniques of petroleum prospecting.

COVERAGE: The collection contains 18 articles compiled by staff members and aspirants of the Laboratory for Nuclear Geology and Geophysics of the Petroleum Institute (now the Institute for Geology and Mineral Fuel Processing) of the Academy of Sciences USSR, the Laboratory for Radioactive Logging of the All-Union Scientific Research Institute of Geophysics, and the heads of councils for planning research projects for petroleum enterprises. The articles treat new material on radiometric surveying in petroleum geology, describe radiometric instruments (counters, etc.) for registering neutrons and gamma rays, give the results of research with models of rock strata, introduce fundamentals of a new method for effectively utilizing radioactivity in the analysis of rock samples from petroleum-survey bore holes, etc. Problems of method in the study and interpretation of radiometric measurements in bore holes are reviewed, as well as the results of studies in the nonabsorption of tritium in tracing the movement of petroleum and water in a stratum. Finally, a new method of surveying based on measuring the radioactivity of the surface of a prospective petroleum deposit is described. No personalities are mentioned. References accompany each article.

YERMAKOV, Y.I.

Apparatus for determining the electric conductivity and concentration of solutions. Zav.lab. 26 no.2:229-230 '60. (MIRA 13:5)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I. Mendeleyeva.
(Solution (Chemistry)) (Electric conductivity)

YERMAKOV, V.I.; SAKODYNSKIY, K.I.

Use of high-frequency analysis in the study of absorption kinetics. Khim.prom. no.12:868-870 D '61. (MIRA 15:1)
(Absorption)

ZAGORETS, P. A.; SMIRNOV, N. I.; YERMAKOV, V. I.

Investigation of solutions by high-frequency methods. Part 4: Frequency of the measuring generator as dependent on the conductance and dielectric constant of electrolyte solutions. Zhur. fiz. khim. 36 no.12:2743-2748 D '62. (MIRA 16:1)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyeva.

(Electrolyte solutions)

YERMAKOV, V. I.; SMIRNOV, N. I.; ZAGORETS, N. A.

Study of solutions by high-frequency methods. Part 6. Zhur. fiz. khim. 37 no. 3:544-552 Mr '63. (MIRA 17:5)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyeva, Moskva.

ZAGORETS, P.A.; YERMAKOV, V.I.; GRUNAU, A.P.

Study of solutions by high-frequency methods. Part 8: Structure of Co^{2+} and Cu^{2+} solvates in methanol solutions. Zhur.fiz.khim. 37 no.10:2155-2162 O '63. (MIRA 17:2)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyeva.

SHILOV, Yu.M.; DARAGAN, V.L.; YERMAKOV, V.I.

Possibility of determining the moisture of the granular substance for tablets by measuring its dielectric permeability. Aptech. delo 12 no.3:22-24 My-Je'63 (MIRA 17:2)

1. Tsentral'nyy aptechnyy nauchno-issledovatel'skiy institut i Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyeva.

YERMAKOV, V.I.; ZAGORETS, P.A.

Study of electrolyte solutions by high frequency methods. Part 5. Zhur.fiz.khim. 37 no.1:184-186 Ja '63. (MIRA 17:3)

1. Khimiko-tekhnologicheskiy institut imeni Mendeleyeva.

YERMAKOV, V.I.

Improving pneumatic systems of automobiles. Avt. prom. 30 no.11: 17-18 N '64 (MIRA 18:2)

ACCESSION NR: AP4034592 S/0076/64/038/004/1030/1031

AUTHORS: Yermakov, V.I.; Zagorets, P.A.; Grunau, A.P.

TITLE: A device for thermostating specimens in NMR experiments

SOURCE: Zhurnal fizicheskoy khimii, V.38, no.4, 1964, 1030-1031

TOPIC TAGS: thermoregulator, nuclear magnetic resonance, control circuit, temperature control, gas heat exchanger, spin echo

ABSTRACT: The article describes a device, which uses gaseous heat exchangers, for thermostating specimens in experiments with spin echo. The temperature of the investigated solutions was maintained at 40 to -30C as desired. Nitrogen gas was used as a heat exchanger. Its flow was regulated by changing the current through the heater in a Dewar flask with liquid nitrogen. To minimize the consumption of nitrogen and to achieve lower temperatures, the measuring head with the specimen was separated from the poles of the electromagnet by an air gap. In addition, the poles of the electromagnet are cooled by spiral tubes, placed around the poles, through which water

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ACCESSION NR: AP4034592

is passed. The desired temperature level with accuracy of 0.01 deg. is maintained constant automatically by means of a device consisting of a termister bridge and a regulating potentiometer, PSR-1-0.1. Orig. art. has: 2 figures.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskiy institut im. D.I. Mendeleyeva (Moscow Institute of Chemical Technology)

SUBMITTED: 06Jul63 ENCL: 00

SUB CODE: NP, TD NR REF SOV: 001 OTHER: 001

Card 2/2

ZAGORETS, P.A.; YERMAKOV, V.I.; ORUNAU, A.P.

Study of solutions by high frequency methods and by the nuclear magnetic resonance method. Part 11. Zhur. fiz. khim. 39 no.2: 456-458 F '65. (MIRA 18:4)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyeva.

YERMAKOV, V.I.; ZAGORETS, P.A.

High-frequency studies of electrolyte solutions. Part 9: Role of ionic atmosphere in forming the structure of electrolyte solutions. Effect of temperature on the structure of electrolyte solutions. Zhur. fiz. khim. 38 no.12:2968-2971 D '64. (MIRA 18:2)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I. Mendeleyeva.

YERMAKOV, V.I.; MARTYUSHIN, I.G.

Investigating the gas content of a bubbling layer for processes with solid phase participation. Khim. prom. 42 no.9:701-703 S '65. (MIRA 18:9)

ZAGORETS, P.A.; YERMAKOV, V.I.; GRUNAU, A.P.

Study of solutions by the high-frequency methods and by the nuclear magnetic resonance method. Part 12. Zhur.fiz.khim. 39 no.7:1552-1555 Jl '65. (MIRA 18:8)

1. Khimiko-tekhnologicheskiy institut imeni D.I.Mendeleyeva.

YERMAKOV, V.I., [illegible], A.E., ZAGORETS, D.S.

Capacity [illegible] for radiochemical studies. Zhur. fiz. i khim. 35 no.6:1329-1331 Je '61. (MIRA 14:6)

1. Moskovskiy khimiko-tekhnologicheskiy [illegible] im. Mendeleyeva. Submitted March 11, 1960.

ACC NR: AP7002707 (A) SOURCE CODE: UR/0115/66/000/012/0051/0053

AUTHOR: Yermakov, V. I.; Zemskov, Ye. M.; Sachkov, V. I.

ORG: none

TITLE: Some relations characterizing the beam path in a cesium frequency standard

SOURCE: Izmeritel'naya tekhnika, no. 12, 1966, 51-53

TOPIC TAGS: frequency standard, cesium, frequency control, atomic clock

ABSTRACT: Early authors' experiments with the cesium atomic-beam frequency standard involved a collimating diaphragm and were found to be unwieldy. Hence, further experiments were conducted without collimators, their functions being performed by beam slits cut in the resonators. Formulas are deduced which impose certain conditions on the widths of the slits in the resonators, source, and detector and also on the field gradient of the deflecting magnets. These conditions make possible successful operation of the frequency standard not equipped with the collimating diaphragm and having symmetrical beam deflection. These relations are derived: detector slit width

$$b_n + \frac{l_0}{l_1 + l_2 + l_3 + l_4}\, b_p < \frac{4M_{0\mu_0}\nabla B}{3m\alpha^2}\, l_3\left(\frac{l_3}{2} + l_4\right)$$

$$b_0 = 2b_n + b_n.$$

$$b_p < \left[\frac{4M_{0\mu_0}\nabla B}{3m\alpha^2} l_3\left(\frac{l_3}{2} + l_4\right) - b_n\right]\frac{l_1 + l_2 + l_3 + l_4}{l_0},$$

Card 1/2 UDC: 621.373.(083.76):546.36

ACC NR: AP7002707

The beam can be limited either by the first (from the source) or by the second resonator. If $b_n + b_p < \frac{a l_2}{v^2}(2l_1 + l_2)$, the first resonator places the limitation; if $b_n + b_p > \frac{a l_2}{v^2}(2l_1 + l_2)$, the scond. Here, b_n - source slit width and b_p - resonator slit width. Actually, both resonator slits act simultaneously as the beam contains atoms that have different speeds. Orig. art. has: 2 figures and 24 formulas.

SUB CODE: 09, 20 / SUBM DATE: 21Jul66 / ORIG REF: 000 / OTH REF: 001

Card 2/2

SHILOV, Yu.M., kand. farm. nauk; DARAGAN, V.L.; YERMAKOV, V.I., kand. khim. nauk

High-frequency device for the determination of moisture in samples of loose preparations. Sbor. nauch. trud. TSANII 6: 127-133 '64. (MIRA 19:1)

1. TSentral'nyy aptechnyy nauchno-issledovatel'skiy institut (for Shilov, Daragan). 2. Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyeva (for Yermakov).

ZAGORETS, P.A.; YERMAKOV, V.I.; GRUNAU, A.P. (Moskva)

Study of solutiond by high-frequency methods and by the method of nuclear magnetic resonance. Part 10. Zhur. fiz. khim. 39 no. 1:9-12 Ja '65 (MIRA 19:1)

1. Khimiko-tekhnicheskiy institut imeni D.I. Mendeleyeva, Moskva. Submitted June 26, 1964.

YERMAKOV, V.I.

Relation of the composition of Lower Cretaceous natural gases in the Northern Caucasus to the metamorphosing degree of formation waters. Dokl. AN SSSR 165 no.4:923-926 D '65. (MIRA 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut prirodnogo gaza. Submitted March 16, 1965.

YERMAKOV, V.I.

Zonal distribution of diluted gases of the Lower Cretaceous aquiferous complex of Ciscaucasia. Dokl. AN SSSR 161 no.2: 447-450 Mr '65. (MIRA 18:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut prirodnogo gaza. Submitted June 13, 1964.

VASIL'YEV, Ye.A., red.; YERMAKOV, V.I., red.; KALUZHSKIY, N.A., red.; KOMSHILOV, N.F., red.; MATYUSHKINA, A.P., red.; KIKIIOV, G.V., red.; RAYEVSKAYA, V.S., red.; SHCHEMELEVA, A.V., red.

[Materials of the Conference on the Overall Use of Wood] Materialy Konferentsii po kompleksnomu ispol'zovaniiu drevesiny. Petrozavodsk, Karel'skoe knizhnoe izd-vo, 1964. 306 p. (MIRA 18:1)

1. Konferentsiya po kompleksnomu ispol'zovaniyu drevesiny, Petrozavodsk, 1961.

1. MUSTEL', P. I. ; YERMAKOV, V. K. Eng.; MINAS'YAN, V. P.,Eng.; DZASOKHOV, A. KH.

2. USSR (600)

4. Mine ventilation

7. "Mine ventilation." Reviewed by P. I, Mustel', V. K. , Yermakov, V. P., Eng., Minas'yan, Gor. zhur. no. 11, 1952

9. Monthly List of Russian Accessions, Library of Congress, _____1953. Unclassified.

YERMAKOV, V.K.; SHUR, A.S.

Porous structure of magnetite from ferruginous quartzites of the Urals and southern Siberia. Zap.Vses.min.ob-va 84 no.4:454-459 '55. (MLRA 9:2)
(Ural Mountains--Magnetite) (Siberia--Magnetite)

YERMAKOV, V.K.

Composition and genesis of Pre-Cambrian ferruginous quartzites on the western slope of the Southern Urals. Trudy Gor.-geol. inst. UFAN SSSR no.40:67-80 '59. (MIRA 13:11)
(Ural Mountains--Quartzite)

YEMELYANOV, V. N. --

"The Legal-Medical Significance of Parasitic Invasions."
Cand Med Sci, First Moscow Order of Lenin Medical Inst,
1 Nov 54, (VM, 20 Oct 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (10)

SO: Sum. No. 481, 5 May 55

YERMAKOV, V. M., GONCHAROV, V. P., and VDOBIN, I. T.

"The Effect of Neuroplegic Mixtures on the Ability of Animals to Withstand Oxygen Starvation and Burn Shock," from the book Theses of the Reports of the Scientific Session of the Military Medical Academy im. s. M. Kirov, Tezisy Dokladov Nauchnoy Sessi, 29 Oct-2 Nov 1956, Leningrad.

YERMAKOV, V.M., kand.med.nauk

Fatal outcome following invasion of the upper respiratory tract by ascarids. Vest.oto.-rin. 20 no.3:74-76 My-Je '58 (MIRA 11:6)

1. Iz kafedry sudebnoy meditsiny (zav. - prof. V.F. Chervakov) I Moskovskogo meditsinskogo instituta.

(ASCARIDS
upper resp. tract (Rus))
(RESPIRATORY TRACT, dis
ascariasis of upper tract (Rus))

YERMAKOV, V. M.

"An Approach to the Problem of Natural Focalization of Trichinosis."

Tenth Conference on Parasitological Problems and Diseases with Natural Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of Sciences, USSR, Moscow-Leningrad, 1959.

First Moscow Medical Institute

YERMAKOV, V.M., kand.med.nauk

Cysticercosis in children. Pediatriia 38 no.10:64-68 O '60.
(MIRA 13:11)

1. Iz kafedry obshchey biologii (zav. - zhlen-korrespondent AMN SSSR prof. F.F. Talyzin) i kafedry sudebnoy meditsiny (zav. - zasluzhennyy deyatel' nauki RSFSR prof. V.F. Chervakov) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova (dir. - prof. Kovanov, V.V.)
(CYSTICERCOSIS)

YERMAKOV, V.M.; KUKLINA, N.V.

In the Atkar Production Administration. Zashch. rast. ot vred. i bol. 9 no.3:5-7 '64. (MIRA 17:4)

1. Glavnyy agronom Atkarskogo proizvodstvennogo upravleniya, Saratovskoy oblasti (for Yermakov). 2. Nachal'nik otryada po zashchite rasteniy Atkarskogo proizvodstvennogo upravleniya, Saratovskoy oblasti (for Kuklina).

22545

1/10 ... 11, 1013, 014 S/129/61/000/005/001/003
E111/E152

AUTHORS: Rotak, Ya.B., Candidate of Technical Sciences, Orzhekhovskiy, Yu.F., Candidate of Technical Sciences, Fevzner, L.M., Candidate of Technical Sciences, Roshchina, I.N., Engineer, and Yermakov, V.N., Engineer.

TITLE: Thermal-mechanical treatment of steel to give high strength

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov, 1961, No.5, pp. 2-9

TEXT: The authors point out that recently much attention has been given to combined mechanical and head treatment, by two possible methods. In one method the steel is rapidly deformed in the austenite-stable temperature range and quenched. While this improves the steel in many ways it fails to increase tensile strength. In the second method the steel is deformed at a temperature between the martensite point M_d and the recrystallization temperature, and quenched. This gives increased strength with satisfactory plasticity. Results of thermal-mechanical

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Thermal-mechanical treatment of steel to give high strength

treatment are not universally successful, and there are no reliable data on the practical use of the "ausform" or "ausforming" treatment widely advertised in the USA. The object of the present work was the study of thermal-mechanical treatment of alloy structural steels to a high strength and the structure produced by the treatment. The composition of the steels was as shown in Table 1, steels A-Г being melted in induction and Д and E in arc furnaces; the first group were austenitized at 1000, the second at 900 °C. After cooling in a nitrate bath to the deformation temperature the steels were rolled in 4-5 passes (reduction 90%), oil-quenched and tempered. To reduce cooling the work was reheated between passes and other measures taken, e.g. rolls were preheated to 100 °C. A portable magnetic instrument (developed by G.Yu. Sila-Novitskiy and T.D. Kutyshkina) was used to detect isothermal-decomposition products; if found, the specimen was rejected. After treatment specimens had a hardness R_C of 58-64 and mechanical-test pieces were prepared by spark machining and removal by grinding (temperature kept below 100 °C)

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Thermal-mechanical treatment of steel to give high strength

of a 0.5 mm deep surface layer. Fig.2 shows tensile strength kg/mm^2 and relative elongation as functions of carbon content for steels A, B, Д and E after treatment (90% deformation at 550 °C, 4 hours tempering at 100 °C); for steel A tempering at 100 and 200 °C is shown by points 1 and 2 respectively, steels E and Д indicated by point 3. Fig.3 shows for steel Д tensile strength and elongation in relation to the 90% deformation temperature (tempering at 100 °C). The effect of variation in austenitization temperature with 90% deformation and tempering at 100 °C of steel A on tensile strength, Rockwell hardness and elongation is shown in Fig.4. Fig.5 shows the effect of tempering temperature on these properties of the normally thermomechanically treated alloys B and Г (left- and right-hand graphs respectively). The treatment enabled a tensile strength of 280-300 kg/mm^2 and elongation of 6% to be obtained for the steels tested, which is better than with ordinary or stepwise hardening followed by low-temperature tempering. As carbon content rises to about 0.5% strength of thermomechanically treated steels rises, and falls with higher

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Thermal-mechanical treatment of steel to give high strength

C content due to semi-brittle or brittle fracture. The best strength/plasticity combination was obtained with tempering at 100 °C. In some experiments on steel 6 the deformation was decreased to 50%; the results were less favourable than with the 90% deformation as regards strength, but gave high plasticity. The advantage of 50% deformation is that it can be effected at relatively high temperatures, even above the recrystallization temperature. Bend tests on 60 x 10 x 2 mm plates of steel 6 heated in various ways were also carried out. Electron-microscopic study of the fine structure of thermomechanically treated steel A showed a pronounced texture and considerable refinement of martensite plates. X-ray diffraction by rotating specimens was also studied (with a UPC-50M (URS-50I) ionization apparatus with automatic recording of intensity distribution in $Fe K_{\alpha}$ radiation): block size of the thermomechanically treated steel was one half to one quarter that obtained with ordinary hardening. The authors conclude that structure refinement is one factor in the effectiveness of the treatment.
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S/129/61/000/005/001/003
E111/E152

Thermal-mechanical treatment of steel to give high strength

V.V. Chugunov, K.S. Medvedeva, G.G. Solov'yeva, Ye.G. Filippova, T.D. Kubyshkina, V.V. Bol'shakova and Yu.N. Kabanov participated in the work.

There are 8 figures, 4 tables and 21 references: 13 Soviet and 8 English. The four latest English language references read:

Ref.8: E.B. Kula, J.M. Dhosi, "TASM", v. 52, 1960.

Ref.11: D.J. Schmatz, V.F. Zackay, "TASM", v. 51, 1959.

Ref.12: D.J. Schmatz, J.C. Shyne, V.F. Zackay, "Metal Progress", v.76, No.3, 1959.

Ref.13: J.C. Shyne, V.F. Zackay, D.J. Schmatz, "TASM", v.53, 1960.

Card 5/5

YERMAKOV, V.N.

POTAK, I. M.[Potak, Ya.M.]; ORJEHOVSKI, I. F.[Orzhekhovskiy, Yu. F.]; PEVZNER, L. M.; ROSCINA, I. N.[Roshchina, I. N.]; ERMAKOV, V.N. [Yermakov, V. N.]

Thermomechanical treatment of steel for the obtainment of a high mechanical resistance. Analele metalurgie 15 no.4:114-123 O-D '61.

(Steel—Heat treatment)

POTAK, Ya.M., kand.tekhn.nauk; ORZHEKHOVSKIY, Yu.F., kand.tekhn.nauk; PEVZNER, L.M., kand.tekhn.nauk; ROSHCHINA, I.N., inzh.; YERMAKOV, V.N., inzh.

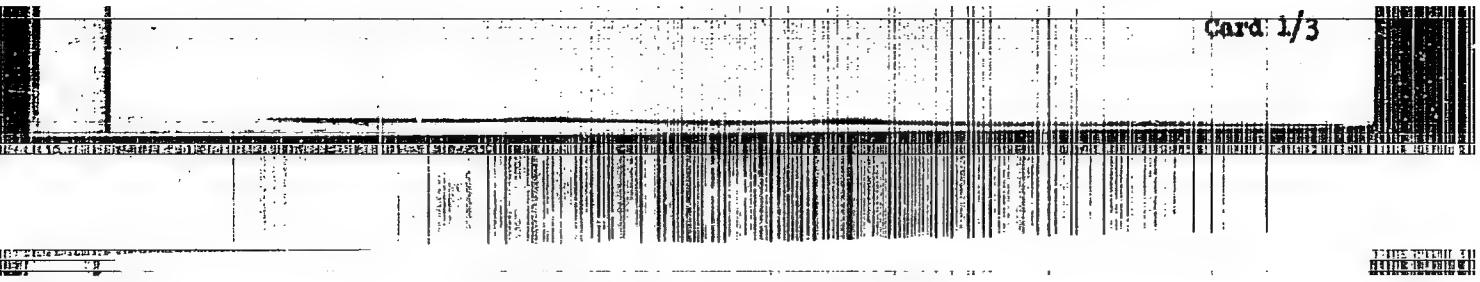
Thermal and mechanical treatment of steel for higher strength. Metalloved. i term. obr. met. no.5:2-9 My '61. (MIRA 14:5)
(Steel, Structural—Hardening)

Yermakov, V. N.

AID Nr. 977-2 27 May

AUSFORMING OF STRUCTURAL STEELS (USSR)

Yermakov, V. N., V. V. Chugunov, and Yu. F. Orzhekhovskiy. Metallovedeniye i termicheskaya obrabotka metallov, no. 4, Apr 1963, 25-29.
S/129/63/000/004/006/014



and 12 and 13, steel 4 remelted in a consumable-electrode vacuum arc furnace. The ausforming consisted of austenitizing at 1000°C, salt-peter bath or furnace cooling to 500°C, rolling in 5 to 7 passes with a total reduction of 90%, and oil quenching. This was followed by tempering at 100, 200, 300, or 400°C for 3 hrs. The specimens were encased in [illegible] stainless steel envelopes; rolls were preheated to 60-100°C. In all steels the best combination of strength and ductility -- tensile strength σ_b of 280-290 kg/mm^2 and elongation of δ = 6 to 9% -- was obtained by tempering at 100°C. Remelted steels generally were found to have higher strength and ductility. After tempering at 100°C the induction-melted steels had a yield strength $\sigma_{0.2}$ of 200.5 kg/mm^2, σ_b = 266.5 kg/mm^2, δ = [illegible]%. In remelted steels (except for steels vacuum-remelted in a magnetic field, σ_b varied from 280 to 290 kg/mm^2, $\sigma_{0.2}$ from 180 to 210 kg/mm^2, and δ from 6 to 10%. Steels conventionally hardened and tempered at 100°C in many cases showed partial brittle failure. Short-time

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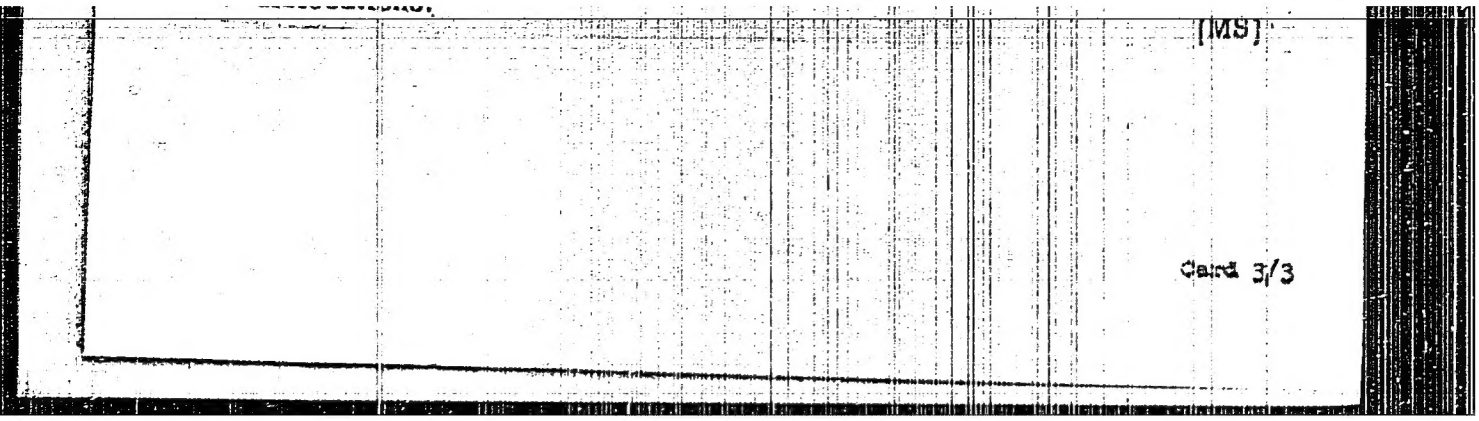
AUSFORMING OF STRUCTURAL STEELS [Cont'd] S/129/63/000/004/006/014

tests at elevated temperature showed that ausformed steel with 0.28% V is more heat resistant at temperatures up to 400-500°C than steel without V. Ausforming results in a considerable antigravity-c



EXCERPTA MEDICA Sec 9 Vol 13/6 Surgery June 59

3031. (879) INTRA-AORTIC BLOOD TRANSFUSION (Russian text) - Ermakov V. S. - KHIRURGIYA 1958[4],11 (23-27) Illus. 1

A series of cases is presented in which transfusions into the abdominal aorta were employed. The method was used in grave surgical shock and in blood loss. A good and stable effect was seen in 7 out of 14 patients who recovered. An effect of short duration was obtained in 2 patients. The observations show that the intra-aortic transfusion is a powerful therapeutic measure which may be employed in prophylaxis and in combating severe shock. The rise of arterial blood pressure, improvement of the cardiac activity and respiration appeared directly after the injection of the first portions of the blood. The total amount of blood injected in shock was 70-140 ml., while in shock combined with blood loss it was 250-300 ml. A special method for the intra-aortic blood transfusion, which enables to control the aortic blood pressure and, consequently, to determine the required amount of blood for the achievement of the effect is suggested.

Faculty Surgery Clinic, Kuban Med Inst.

YERMAKOV, V. S., Cand Med Sci -- (diss) "Discontinuous and momentary intra-arterial blood transfusion." Saratov, 1960. 11 pp; (Ministry of Public Health RSFSR, Saratov State Medical Inst); 200 copies; price not given; (KL, 26-60, 143)

YERMAKOV, V. S.

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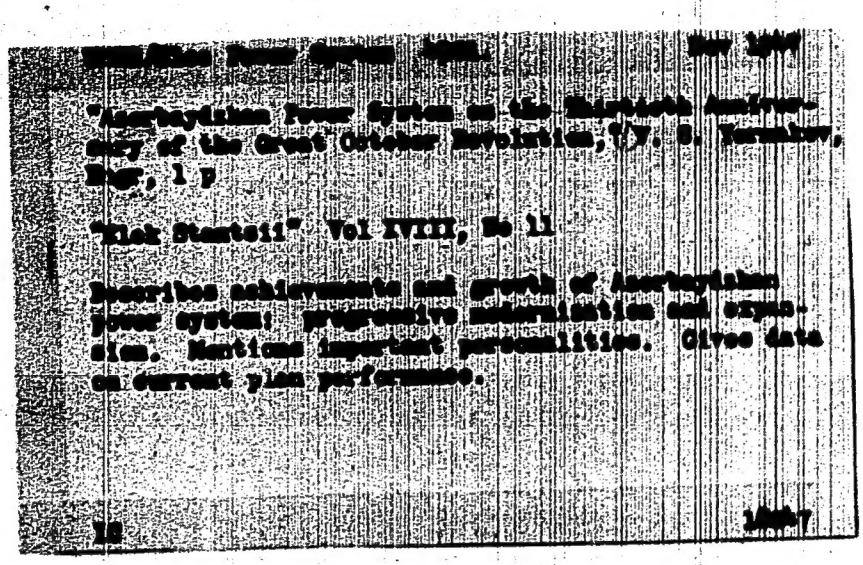

"Acetylene Power System on the Railroads of the Great October Revolution," V. S. Yermakov, Engr, 1 p

"Elek Stantsii" Vol XVIII, No 11

Describes achievements and growth of Acetylene power system; progress, basic data and organization. Mentions important personalities. Gives data on current plan performance.

18

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